DOCUMENT RESUME

ED 050 888 24 RC 005 324

TITLE	Basic Program Plan for Communications Arts Program.
INSTITUTION	Southwestern Cooperative Educational Lab., Albuquerque, N. Mex.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO	BR-6-2827
PUB DATE	15 Apr 70
CONTRACT	OEC-4-7-062827-3078
NOTE	99p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Academic Performance, *American Indians, *Communication Skills, Culture Conflict, Educationally Disadvantaged, Educational Strategies, Facility Requirements, Instructional Materials, Learning Activities, Low Achievement Factors, *Mexican Americans, *Preschool Programs, *Primary Grades, Self Concept

ABSTRACT

The Southwestern Cooperative Educational Laboratory's Communication Arts Program for American Indian and Mexican American youngsters age 3 through 9 outlines a day which consists of experiences that develop the child's oral language capacity and reading and writing skills in English. The basic plan rests on an installation strategy that assumes and prescribes roles for teachers, teacher aides, parents, and administrators--emphasizing their roles as change agents while stressing a need for a comprehnsive training program. The child is defined as the primary client and the teacher, teacher aide, parent, and administrator are secondary clients who surround and screen the child during the educational process. The entire secondary-client population is considered the key to increasing the child's probability of success in school. The child's problem in school is seen as falling into 3 broad areas: academic performance, interpersonal relationships, and intercultural ability. Outcomes are specified for each area for the child and for each class of secondary client. One set of curriculum and installation products is specified for the entire Communication Arts Program. Paradigmatic schedules are provided to demonstrate how these products integrate in the various formats of the program. Included is a schematic relationship showing activities, components, products, and the schedule for development of the program. Estimates of the annual costs for the various activities are also provided. (Author/JH)

ED050888

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

RECEIVED
JUL 14 1971
NMSU
E.R.I.C.

BASIC PROGRAM PLAN

FOR

COMMUNICATIONS ARTS PROGRAM

April 15, 1970

Southwestern Cooperative Educational Laboratory, Inc.
117 Richmond Drive, N.E.
Albuquerque, New Mexico 87106

This publication is issued pursuant to terms of Contract No. OEC-4-7-062827-3078 with the Bureau of Research Office of Education, U.S. Department ot Health, Education and Welfare. The views and findings stated herein are not necessarily those of the U.S. Office of Education, and no endorsement is stated or implied.

RC005324

southwestern
cooperative
educational
laboratory

117 richmond drive ne
albuquerque, new mexico 87106
area code 505 265-9561

April 15, 1970

The attached Basic Program Plan for a Communication Arts Program is submitted to the Office of Education in fulfillment of the scope of work Item II, B.1, Model II Communication Arts to complete the general formulation or design of the Laboratory's total language arts program.

This plan represents an extensive effort on the part of the Laboratory staff in planning, drafting, examination, re-drafting and revision. I am proud of all of their efforts and would like to acknowledge Dr. Robert T. Reeback's contribution as overall chairman of the task groups.

Sincerely,

James L. Olivero
Executive Director

JLO:ala

TABLE OF CONTENTS

Abstract

Problem Statement 1

Client Populations Defined 7

Child's Academic Performance 13

Child's Interpersonal Relationships 15

Child's Intercultural Ability 16

Secondary Client Population 18

Educational Outcomes 24

The Child's Performance in the Institutional Setting 25

The Child's Relation to Self and Others 27

The Child's Negotiation of an Intercultural Situation 28

Success Criterion - Achievement on Standardized Tests 32

Success Criterion - Range of Audiences, Topics, Situations 35

Success Criterion - Skills and Attitudes in Reading and Writing 42

Strategies Available 46

Strategy Chosen 60

Idealized Installation Strategy 65

Paradigmatic Schedule for Pre-Reading or Reading & Writing Classroom 68

Paradigmatic Schedule for Pre-School Classroom 76

Components/Activities/Products 79

Product Development Strategies 85

Work Plan 86

Future Implications 90

Bibliography 91

ABSTRACT

The Southwestern Cooperative Educational Laboratory's Communication Arts Program outlines a completely reconstituted day both for preschool and for those youngsters in school through the age of nine. This day calls into play experiences that develop the child's oral language capacity, and builds into this capacity additional (English) reading and writing skills. The Basic Program Plan rests on an installation strategy that assumes (and prescribes) roles for teachers, teacher aides, parents, and administrators. It emphasizes their roles as change agents while stressing a need for a comprehensive training program.

This plan states the needs and defines the child as a primary client and the teacher, teacher aide, parent, administrator as secondary clients. It shows that these latter clients surround and screen the child during the educational process. The entire secondary client and population is considered the key to increasing the child's probability of success in the school. Their wholehearted support is necessary if any educational program is to succeed.

The child's problem in school is seen as falling into three broad areas, 1) the child's academic performance; 2) the child's interpersonal relationships; 3) the child's intercultural ability. Outcomes are specified for the child under these broad areas. Further, outcomes are specified for each

class of secondary client. However, the outcomes for secondary clients are stated in terms that apply to the child's performance and contribute to providing him with the skills needed in each appropriate area.

A realistic strategy to accomplish these outcomes, in each case a curriculum item or product, is accompanied by a companion installation strategy. Occasionally, a facet of installation will be in a stage of development differing from the associated curriculum package. Therefore, a variety of installation strategies can be attempted utilizing curriculum products available on the shelf or at some stage of development as appropriate. These curriculum products are an essential vehicle to test a proposed installation process.

One set of curriculum and installation products is specified for the entire Communication Arts Program. These products provide an upgraded curriculum structure from preschool to age nine. Paradigmatic schedules for a "day" are provided to demonstrate how these products integrate in the various formats of the Communication Arts Program. Included is a schematic relationship showing activities, components, and products as well as the schedule for development. Estimates of the annual cost for the various activities also are provided.

CHAPTER I

THE PROBLEM

I. INTRODUCTION

Studies of the educational achievement of certain Southwest minority groups support the argument that the public schools do not deal effectively with the educational needs of this population. As U. S. Commissioner of Education James Allen stated in October, 1969, "The vast educational system in the United States, while productive for the majority of our population, has failed and continues to fail a substantial proportion. The most conspicuous among these whom it fails are those who suffer from . . . physical and mental handicaps, discrimination, poverty, and other environmental deficiencies. For these the principle of the equality of educational opportunity has little meaning."

The Commissioner proposed three broad goals for the Office of Education, one of which is most appropriate for the Southwestern Cooperative Educational Laboratory--"The elimination of failures with respect to the education of the disadvantaged." He added that, "Fundamental . . . is the achievement of the Right to Read goal established as a target for the 1970's."

The failure of the disadvantaged to achieve in public schools is well documented. The educationally neglected are the children whom the schools have failed. Ethnic leaders assert that the schools have failed to teach their children. Their feeling was strongly expressed in a conference, held at SWCEL in May, 1968, and reported in a publication, Ethnics on Education.[1] Ralph Keen, representing the Cherokee Nation, summarized the feelings of the others when he said, "The Cherokee Nation is unable to shape, form, or influence education of its youngsters. I, for example, do not feel I can in any way influence the education of Cherokee youngsters. In fact, this powerlessness is the reason I am here."

Mrs. June Shagaloff, representing the National Association for the Advancement of Colored People, added, "We are very concerned about the quality of education being afforded Negro students in the curricula textbooks. We are concerned about the exclusion of the Negro from American history."

This feeling of being excluded from and by the schools appears pervasive. These ethnic leaders asserted that many minorities are excluded from opportunity; from participating in decisions; from power; from sharing economically; from participating socially; from participating in the attack on their own problems; from the larger

society; from succeeding; when in school, from academic pursuits; from college preparatory programs; from the school itself; and from equality. The conferees thus characterized their people as excluded somehow from sharing in the "American Dream." They asserted that the schools also exclude their children, perpetuating the feeling and the problem. This feeling expressed by these groups--that they are an "excluded population"--has led SWCEL to refer to their offspring as "excluded children" describing them as from a population that is, or at least feels, excluded. The term "excluded," as used by the Laboratory and expressed by the ethnic leaders, could be analogous to "disadvantaged," at least from a middle-majority point of view.

The extent of educational disadvantage experienced by Mexican American and American Indian children, the major portion of SWCEL's "community of concern," was clearly pointed up in a report entitled, Equality of Educational Opportunity, OE-38001,[2] to the U. S. Commissioner of Education, and submitted to the President and the Congress on July 2, 1966. It showed that the Southwestern disadvantaged child faces an almost impossible struggle as a first-year pupil in a middle-class school. Typically, he enters school with a lack of English and school oriented experiences, and the

school does little or nothing to alleviate these deprivations or to accommodate him. Bass, [3] Zintz, [4] and Smith [5] insist that many Indian and Spanish speaking pupils have insufficient knowledge of English for negotiation of the system as we know it.

Value differences provide a major source of conflict for the "excluded child" in school. Each group in SWCEL's Intended Client Population (ICP) holds values differing in type and degree. In Education Across Cultures, Zintz compares Anglo and Pueblo differences and Anglo and Spanish American differences and reports that the greatest need for teachers of Indian children is to understand the child's background. [6] "The teaching of the family, the school and the church in the American culture have not prepared most teachers for these Indian children. Social distance between the Indian pupil and middle-class teacher is an immense one." [7]

SWCEL perceives these conflicts and deprivations as part of the cause and perpetuation of failure in school of the "excluded child." The foregoing views are substantiated by SWCEL and its cooperating agencies. Experience supports the previously stated definition and description of the problem, and the conclusion that a major problem of the excluded child is a deficiency in communication skills. Further, experience dictates the proposal that communication arts be the program focus of the main effort to alleviate and prevent the deficits.

Communication arts includes basic communication skills of standard language arts programs--listening, speaking, reading, and writing. However, the term communication arts implies attention to areas not ordinarily reflected in a traditional language arts program, such as the full range of communication channels important to human relations.[8,9,10] This includes consideration of the student's cultural attributes and his parents, increasing his motivation for educational achievement and developing his self-concept.

The Communications Arts Program outline in this Basic Program Plan differs from other such programs. While it establishes skills in listening, speaking, reading and writing, the program is so structured that the content of all of these elements are child selected in contrast to more conventional programs that mandate all content. This element of control by the child insures that the content will be relevant and appropriate with respect to cultural, anthropoligical , linquistic and experiential coverage. Because it is the child who establishes the particulars of content, the program can be considered to be self-validating if the teacher's reaction can be successfully structured. This program will also emphasize development of varied interactions, both silent and spoken, between teacher and pupil, and pupil and pupil, to elicit self-confidence, receptivity, appreciation and awareness, orientation to learning, and mutual valuing of each other's culture.

It may be proper here to support the foregoing with a resume of how some of SWCEL's work supports these contentions. Human relationships are a significant

aspect in all educational problems. Improvement in such relationships can be structured. SWCEL has accomplished this in a field test of elements of its program. Specifically: the current SWCEL Oral Language Program (OLP Mark I) dictates, and supervisory directions check the presence of a high rate of interaction, reinforcement, verbal and non-verbal (touching, if appropriate), suitable gestures and body signals, talk by the child (to the teacher, to other children and to and through puppets); that the teacher attend to the individual child; and that the child attend the teacher and other children. If the teacher follows the prescribed instructional methods, the experience proves successful for the pupil and teacher. Success grows from success and OLP contributes to the complete Communication Arts Program. The child has gained increased skill in listening and speaking as well as developing a wider, fuller set of interaction patterns.

Directions for the OLP require that the teacher utilize small group instruction. The optimum number of pupils is specified as less than 10. Interaction is specified through instructions to the teacher and in the lesson material. The occasions within each lesson for reaction by the pupil and teacher are structured through a series of cycles wherein the teacher is required to interact with each individual pupil. Recommendations are made with respect to the physical arrangement of the teacher and children maximizing the possibility of developing a setting of closeness and a high degree of rapport. It is assumed that when the children respond to the teacher, the teacher, in turn, will respond to the class. Such structuring of teacher-pupil relationships has shown tremendous promise in OLP field tests. Methodology for applying similar techniques will be developed for the other Communication Arts Program components.

This, as in the SWCEL Oral Language Program, all of the elements of a communication arts program must make their contribution; a complete program will certainly result in increased achievement in the standard elements of language arts, and concomitantly enhance human relationships through increased facility in communication.

II. INTENDED CLIENT POPULATION

A communication arts program, as defined earlier, assumes a client population consisting of children who, for one reason or another, are excluded from full communication with the school and who will, if experience holds, suffer increasing frustration throughout their school experience. Estimates show that there are approximately four million Mexican Americans[11] and just under one million Indians[12] living in the United States. Approximately three million Mexican Americans[13] and four hundred thousand Indians[14] both urban and rural reside west of the Mississippi, especially in Southwestern and bordering states.

SWCEL's programs focus attention on children ages three to nine. Before age three,[15] large numbers of children are not mobile enough to attend any type of educational institutions, and at approximately age nine[16] a significant stage of development has been reached.[17] SWCEL believes that even powerful programs will have diminished impact unless a follow-through program is maintained over a span of several years.[18,19]

This client population numbers roughly nine hundred thousand. More than one and a half million Mexican Americans and Indians in the Southwest are of a school age[20] and a number equal to 50 percent

of those children represents the three-to-nine age bracket. This figure is extrapolated from the 1960 census state population totals, and assumes that 1/20 of the relevant totals are in the client age bracket and socioeconomic status.

Children in this population typically come from a home environment with (1) inadequate or uncertain income, (2) few experiences directly related to the standard school culture, (3) disparity between his repertoire of communication skills and those required by the educational system, and (4) lower expectation for successful school experiences. He often is unaccustomed to the ways of the dominant school culture and is hence "excluded" from a full range of educational opportunities.

Therefore, it is assumed that the client child will encounter frequent discrepancies between his perception of school and the school's perception of the successful child in communication skills (e.g., many schools insist upon "standard American English").

The parameters of the client population are fluid. Firstly, the use of English is more prevalent today among the formerly non-English speaking populations than 40 years ago. Commercial television is only one of several contributors to this change. Consequently, SWCEL expects that some dominant characteristics of the

client population will change over time. This can occur in directions that reduce feelings of exclusion, and can be caused by forces both from within and without the educational establishment.

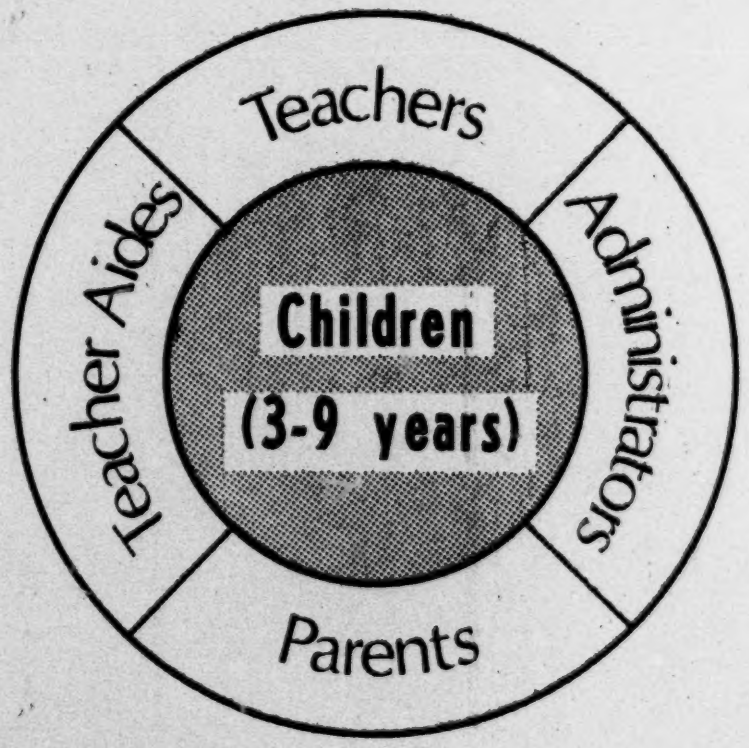
Secondly, without a reversal in the birth rate, and even though people will exit, the SWCEL's client population will greatly increase in the years ahead. For example, the present growth per year of the Indian population on reservations is 3.3 percent. This is three times the rate of the increase of the national population.[21]

Thirdly, SWCEL programs already have extended into states other than those of its original geographic boundaries and SWCEL's Governing Board has stated that the Laboratory must be prepared to take its programs "where the needs are." Geographic boundaries selected for computation of the client population (1) contain a large percentage of the client, (2) place SWCEL centrally in this region, (3) acknowledge fiscal limitations which dictate a wise stewardship in attempts to plan for and serve the largest, nearest number, and (4) establish limits for planning even though responsibilities exist beyond regional and geographic boundaries.

To ensure that the client children within the primary geographic service area and those outside it receive the full impact of the Laboratory's Communication Arts Program, it is necessary to

consider a peripheral cushion of individuals involved in the educational process. The client population cannot be limited to the children exclusively because they cannot be treated in isolation from their environment, and particularly from the significant adults in the peripheral cushion. Hence, the Laboratory defines a secondary client population consisting of those persons who encounter the child, influence his education, and who must be change agents if the child is to receive full benefit from the Laboratory's programs.

This concept of primary client population (the excluded child) and the secondary client population (the school administrators, teachers, teacher aides, and parents) is represented in the following diagram.



Peripheral Cushion (OUTER RING)

A brief description of the secondary clientele follows;

1. A large majority of Southwestern teachers and administrators are Anglo and very few have been adequately trained to work with the primary client. [22] Teacher training institutions have failed to produce educators sensitive to the cultural and linguistic characteristics, the communication deficits, and the remedial requirements of the primary client. [23]

2. Parents in the secondary client population generally can be described as having had little formal education, many times speak a language other than English, do not speak English, work as laborers or in service trades, with an annual income of $3,000. or less. [24]

The entire secondary client population is the key to the problem. Teachers need to understand culturally relevant strategies and materials with special emphasis on the affective dimensions of the teaching-learning process. Such teacher training might not be viable if administrators, the decision makers, are not also included in the client population. The wholehearted support of these groups is absolutely necessary if any educational program is to succeed. They can truly cushion or screen the child from any program.

Therefore, they logically become members of the secondary client population and are afforded the opportunity to become change agents.

Trained teacher aides can be instrumental in helping teachers individualize instruction and understand and employ more culturally relevant instructional strategies. Teacher aides can often be members of the excluded population.

Parents are included as members of the secondary client population because their understanding and active support of educational objectives will have a profound effect on school readiness. This is being demonstrated in an ongoing study conducted by Maya Pines at Harvard University. [25]

In this complex of client populations it should be pointed out that commonalities of needs exceed the differences between the various populations. Not all of the components of SWCEL's communication program will address the entire primary and secondary populations. Specific components of the program will be directed at sub-sets within these primary and secondary client populations. However, the terminal goals of the Communication Arts Program will be relevant to the entire client population.

III. THE PRIMARY POPULATION

The problem, as it relates to the child, is threefold: (1) his performance in the educational setting, (2) his relation to self and others, and (3) his negotiation of an intercultural situation. There is overlapping among the areas, but they do serve to narrow the focus to probable causes of pupil failure.

The Child's Academic Performance

The excluded child frequently is unable to communicate as well in English as is another American child of the same age from the middle majority. He may enter school knowing his mother tongue which could be Spanish, Navajo, Tewa or any of the many other Amerindian languages. Instruction in school is in English, and the books are written for Anglo children of the middle majority. English repertoires are not matched to the demands of this instruction. His troubles begin the first day of school.

Further, many of these children may exhibit or attain "satisfactory" fluency in English in the primary grades. Sometimes silence is taken as a sign of comprehension and fluency is assumed; or the child's ability to respond to and follow adequately the minimal language demands of the classroom is deemed to indicate that he has a

fluent command of English. Often this apparent proficiency is actually only sufficient to negotiate the classroom day. This misleads the teacher. He overestimates the child's ability and, therefore, judges that the child is ready to proceed to reading. The school ignores the fact that listening, speaking, and understanding are essential to further conceptual growth. When these children have to sit in their seats a major portion of the day, silent, listening to the teacher, and doing assigned seatwork, they have little opportunity for growth in language and necessary related skills. They have not been taught how to categorize, to generalize, to synthesize, to evaluate their knowledge, so they are not ready for formal reading instruction as early as is the non-excluded child. This inability of excluded children to successfully undertake reading may be attributed to their deficiency in appropriate entry skills. In summary, often children who appear to possess adequate language comprehension and formulation are, when diagnosed, shown to lack sufficient language capacity to support entry into formal reading.

Coleman,[26] Zintz,[27] and Bass[28] report that even after instruction in conventional programs these children are unable to read well in English, and their mean reading ability is lower than the middle majority's. In addition, the middle-majority scores appear normally

distributed about their mean, but the scores for the excluded child are skewed toward the lower end of the distribution indicating a sort of "compounded" deficit in reading skill.

The Child's Interpersonal Relationships

School entry may precipitate difficulties for any child. An excluded child faces a conflict to the extent that he cannot identify with the school and his familial background at the same time. He may be asked to relate to people one way in school and another way at home. He needs to understand that both ways are acceptable.

Usually an excluded child is faced with an unfavorable comparison between the material wealth of his parents and that of his teachers and others. This may lead the child to lose respect for his parents because they do not seem to be materially successful. The child needs the emotional support offered by his family and must realize that the values and traditions of his background are worth much, even though less well advertised than color TVs, new automobiles, etc. As the child is learning about, and being immersed in, a new culture, membership in his own culture is usually not supported. In fact his own culture is often downgraded; this important source of emotional growth is lost.

The result is that the child leaves school inadequately prepared to meet a world that he feels is against him. His own attitude, partially developed in school, then acts as his worst enemy.

The Child's Intercultural Ability

When the child enters school, he enters an alien culture without the comforting support of his parents. Teachers are among the first members of this alien culture with whom the child must deal. Often, the teachers and school administrators know less about his culture than he knows about theirs.

The members of this culture communicate in ways unfamiliar to the child. The do not always show approval or affection in a consistent manner, and often confuse and frighten the child when they do not mean to. Havighurst and others[29] report that lack of communication is the greatest problem for the excluded child. The burden of accommodating falls almost completely upon the child. He must do much more than learn to speak a new language and to read and write this new language. He may, depending on the circumstances, have to learn a whole set of new expressions and gestures and not merely speak if he is to communicate.

The child in the cross-cultural setting of the schools also needs to learn a new set of customs if he is to be accepted. The eating

habits, dress, etc., communicate to the members of a culture a person's position in that culture. This communication needs to be mastered by the excluded child as surely as the spoken language.

While all of this is taking place, one must remember that the child's original communicative system is good and correct in his own culture, that one culture is not better than the other, but that the child needs to learn about both. Knowledge and appreciation of both cultures is required if the child is to succeed in the public schools.

IV. THE SECONDARY POPULATION

The secondary population must change in order to help the excluded child in school as well as in the greater community of which he will become a part. At the very least, this secondary population of administrators, teachers, teacher aides and parents must not inhibit necessary changes.

Teachers

Most teachers are not aware of the problems that school presents to the excluded child. Their instructional methods, goals, and attitudes often inhibit the development of the child's self-esteem. Present teaching practices downgrade the excluded cultures rather than respecting their values. The teachers do not diagnose or attempt to overcome the child's learning deficiencies.

Typical classroom instruction, goals, scheduling, and physical arrangements have not been adequate or relevant for these children.[30] Had they been, these children (who must be presumed to have the same normal spread of intellectual abilities found in the dominant culture's classrooms) might well have succeeded. The teachers do not recognize nor provide ways of closing the experiential gaps between the way the pupils come to school and what the school expects

of them. These children are not equipped for school, and the teachers do not help them.

Educational research shows that the teacher is the paramount variable;[31] but in this instance he is not effective. Many teachers are not sympathetic to or understanding of the excluded population. The cultural dissonance within the teacher as he encounters the excluded child, coupled with the structures imposed by the school, create conflicts within him in attempting to inculcate the excluded child with the tools necessary for educational success.

Many teachers, year after year, put children into rows, tell them to be quiet and listen, and force them through the standard curriculum designed for the child from the Anglo culture. The constant failure of the excluded child has not altered this pattern.

Teacher Aides

Teacher aides are an increasingly frequent presence in the circle which surrounds the child. They can be extremely valuable though this has not always proved to be the case. Aides do not always come from the child's community. As a result, one of their potential contributions--to serve as a bridge between two cultures--has not always been realized. When the aides come from the excluded community, some of the Anglo-inspired cliches of the "less valuable

culture" still cling to them. They may not bring into the classroom their culture's heritage and pride which could be used as a logical bridge between school and home. Aides often remember their own education, the rigid lockstep of earlier educational experiences, and do not know why such practices must be changed, nor how to change them.

SWCEL in its teacher-teacher aide companion training program has frequently encountered teacher aide attitudes that can be typified as, "If I had a difficult time in school, then these children should be subjected to the same hardships."[32]

Frequently, the potential value of teacher aides is not fully exploited. Teacher aides are not always used in helping the child learn. Their training has been in vain because teachers often do not know how to use them to greater advantage. Teachers and administrators often fail to appreciate the support these aides can provide for the excluded child.

Teachers and teacher aides who responded to the SWCEL role perception pretest disclosed that they formerly regarded the function of the teacher aide as primarily custodial (some occasionally included minor clerical duties). SWCEL is one of the very few organizations implementing joint training of teacher and aide. This strategy has

been employed in the Mesa, Arizona, public schools. Approximately one-fourth of the aides in that system were trained according to SWCEL prescriptions in companionship with their respective teacher. Reports disclose the superior performance and utility of aides so trained. This district, in adopting a policy of joint training and upgraded role perception for teacher aides, conceded that inefficient utilization of teacher aides was a problem in Mesa. SWCEL contends that it is a similar problem elsewhere.

Administrators and Parents

A child's education can be affected by administrators and parents. Parents are the dominating influence in the child's preschool years. Many educators and child psychologists have indicated the importance of this period in the child's education. The parents of the excluded child cannot very well prepare their children to cope with a school system that they have not known or were unable themselves to negotiate. They cannot give the child skills they do not possess.

The parents seldom, if ever, read to the children or have any books in their homes. Therefore, the child does not understand about reading and how it can serve him. They cannot prepare him socially because they were not socially prepared for school themselves. They cannot give the child the necessary values to compete

in today's schools because they often do not hold the values themselves. These parents need help in preparing their children for school, but they also need an understanding, flexible school system and administration. If the parents cannot effectively prepare their child for today's schools, it is desirable that the educational system attempt to accommodate him. The problem is twofold: (1) to predict the degree that schools will accommodate the excluded child, and (2) to prepare parents to assist their child to negotiate the schools.

School administrators faced with the problem of alleviating the educational failure of excluded children need special knowledge and methods that they do not possess.[33] The administrator lacks sufficient knowledge of instructional strategies effective with the children he is serving to be able to train or retain or retain his staff. The administrator lacks flexibility in encouraging use of different teaching methods. The administrator may have to be active in community affairs and more active in determining the needs of his students because deficiencies may exist that are unique to his school. The administrator does not recognize the needs of the community and thus fails to meet these needs by adjusting the school's curriculum.[34] The administrator must have the support of the community and parents.

Without such support, most educational programs will not succeed and the administrator will not benefit the parent-school interaction required by new viable programs. [35]

CHAPTER II

EDUCATIONAL OUTCOMES AND SUCCESS CRITERIA

I. EDUCATIONAL OUTCOMES

Each of the educational outcomes sought in attacking the problem outlined in the preceding chapter is shown as a member of one of three following constellations: (1) the child's performance in the institutional setting (school), (2) the child's relation to self, others, or (3) the child's negotiation of an intercultural situation.

The focus is on the child, the primary client. If an outcome is stated in terms of a secondary client (e.g., teachers), it still applies to the child's performance, relation, or negotiation. For example, the outcome, "Teachers will diagnose their pupils' learning needs," is not in itself desired as an isolated outcome. SWCEL materials will assist the teacher in this diagnosis. The Laboratory will make prescriptions for "varying instructional techniques and materials in order to appropriately meet the individual needs of the children" (another teacher outcome). Such outcomes must contribute to providing the excluded child with communication skills needed to function as a learner.

Although domains may be separated for the sake of clarity and categorization, they are related. For instance, a child who has positive feelings toward himself, his teacher, and his school will perform to his capacity. Assignment of outcomes to categories, therefore, must occasionally be arbitrary. Appearance of an asterisk adjacent to an outcome indicates that it falls under one or both of the remaining categories.

The Child's Performance in the Institutional Setting

These outcomes focus upon providing the excluded child with the tools for communication needed to function effectively as learners in school.

Upon completing the program the child will:

function and learn in an environment that utilizes a variety of teaching methods and modes

initiate and direct a progressively increasing share of his learning experience

speak and understand English as well as a comparison group

like and want to read

approach, reach, and maintain level of reading facility needed to function in classroom

maintain academic performance consistent with reading ability

The teacher will:

provide individual and small group instruction

vary instructional techniques and materials to appropriately meet the child's individual needs

diagnose the pupil's learning needs

evaluate his teaching methods

entertain realistic and progressive expectations about the expressive and receptive English repertoires of students

manipulate the classroom conditions to insure an optimal learning environment

stimulate and maintain the child's interest and participation in the instructional process

The teacher aide will:

actively supplement individual and small group instruction

use a variety of instructional strategies

provide input in diagnosing the pupil's learning needs

help evaluate and upgrade her own instructional processes

help arrange the classroom to increase the student's chances of engaging in appropriate behavior

The parents will:

prepare the child for school*

strengthen the child's motivation

help the teacher by providing input regarding the child's learning needs

supplement the child's instruction

The administrator will:

support and promote the use of a variety of instructional strategies and materials, e.g., through staff selection

evaluate individual and small group instruction

promote ongoing SWCEL teaching strategies

The Child's Relation to Self and Others

The child's opportunities for successfully negotiating the school system depend heavily upon his attitudes toward school in general and his classmates, teacher, and self-image in particular. This is especially true of the first-year pupil who still is formulating his attitudes toward achievement, interpersonal relations, and his self-esteem. Ultimately the combined efforts of the teacher, administrator, teacher aide and parents hopefully will shape his behavior toward achieving realization of his potential.

Upon completing the program the child will:

exhibit a positive attitude toward school

relate well with teachers, parents, peers, and other adults in the classroom

accept individuality of others

The teacher will:

enjoy his work

have confidence in and function harmoniously with another adult in the classroom

strengthen the child's positive self-image

perceive implications of his own values in the classroom*

The teacher aide will:

have confidence in and function well with the teacher and other adults in the room

enhance the child's trust of the teacher and other adults

strengthen the child's positive self-image*

The parents will:

enhance the child's trust of the teacher

strengthen the child's positive self-image

The administrator will:

help strengthen the child's positive self-image*

promote the effective cooperation of adults in the classroom

The Child's Negotiation of an Intercultural Situation

These outcomes are directed at the child's general problems in standing at the junction of two cultures--his home and that encountered when he first enters school.

A school or district may attempt to make some accommodations to the child's problems arising from this junction. However, SWCEL predicts that, for the near future, it is the child who will have to adjust to the classroom setting and demands. He must learn to negotiate an intercultural situation which somewhat dictates his behavior, determines his level of aspiration, and his life goals. The following outcomes show that successful engineering by SWCEL will shift this burden to teachers, aides, parents, and administrators who will adjust to the child's problems.

Upon completing the program the child will:

be able to comfortably choose among varied elements of more than one cultural system

continue to value and enjoy the traditions of his home culture

adjust to values of another culture without maladaptive side effects

accept and respect values differing from his own

The teacher will:

accept and respect traditional values of his students

display little ethnocentricity, especially of the linguistic type*

esteem individuality and patterning in human behavior

acknowledge and respect the student's unique socio-cultural characteristics

utilize procedures for increasing student motivation that are most relevant for the unique sociocultural population

The teacher aide will:

accept and respect values differing from her own

perceive implications of her values in the classroom

display little ethnocentricity* (especially of the linguistic type)

acknowledge and respect the student's unique sociocultural characteristics

increase communication between the school and the home

The parents will:

maintain contact with school*

function as resource persons

accept and respect values differing from their own

appreciate their own values

build communication between the home and school

The administrator will:

discourage ethnocentricity* (especially of the linguistic type)

accept and respect values differing from his

perceive implications of his values for the school

acknowledge and respect the student's unique socio-cultural characteristics

build communication between the community and the school

TABLE 1

ANALYSIS OF VARIANCE BETWEEN
ANGLO AND SPANISH FIRST GRADE PUPILS' SCORE
ON THE *GOODENOUGH DRAW-A-MAN* INTELLIGENCE TEST

Analysis of Variance				
Source	df	SS	MS	F
Treatments	1	538	538.0	2.36
Within	333	76,000	228.2	
Total	334	76,538		

$P \geq .05$ Not significant at the .05 level

General Statistics

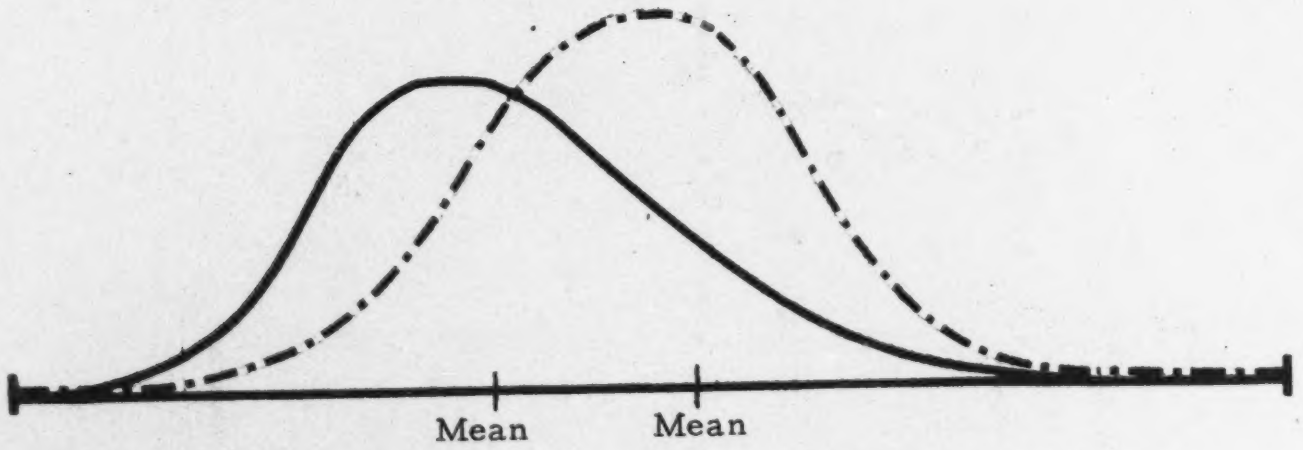
	Mean	Standard Deviation
ANGLO	100.74	15.20
SPANISH	98.11	15.05

SUCCESS CRITERIA, EDUCATIONAL OUTCOMES

I. Success Criteria

Criterion Number One--Achievement on standardized tests.

An analysis of randomly selected school children's test scores on nationally standardized tests will disclose scores in a normal curve as shown by the dotted line below:



A similar examination of first year school children of the excluded population will disclose a negatively skewed curve with a lower mean and a smaller range. The solid line in the figure above depicts this skewed curve. It reflects the client children's lower school related achievement as compared to national norms. This lower achievement usually is interpreted as accounting for the client children's greater dissatisfaction with school and their high droupout rate. The skewed curve does not mean that the children cannot achieve. SWCEL has administered the Goodenough Draw-A-Man Test (GDAM) in what can be described as psychologically comfortable environments.

Results disclose a curve of the scores that can be superimposed on that of a random sample for all children. In other words, the client children's intelligence scores will reveal the same mean, range, and distribution as a national random sample. Since the GDAM Test has been confirmed as a relatively reliable measure of intelligence for young children, these results indicate that the client children have the same potential for school achievement and performance on national tests as any child in the entire population. SWCEL's test results of Goodenough Draw-A-Man Test as given in Table 1[36] indicate no significant difference between Anglo and Spanish surnamed children on the GDAM.

Merz[37] analyzed the test scores and found no significant difference between I. Q.'s of four groups--Anglo, Negro, Mexican American, and Yaqui. This further substantiates the field test data obtained by SWCEL.[38]

SWCEL, therefore, concurs with Khatena and Gowan[39] that highly intensified and appropriate schooling for this population should significantly increase similarities between the client population and their peers. This should ultimately reduce the differences between groups as measured by standarized tests. Consequently, one basic criterion for success in the SWCEL Communication Arts Program will be that client children's performances on standardized tests will more

closely approximate the norms than ever before. Children in the client population, who participate in SWCEL's Communication Arts Program will obtain higher mean scores on standardized tests, will have a greater range of scores, and the distribution of these scores will more closely approximate the normal curve than heretofore.

II. Success Criteria

Criterion Number Two--Range of audiences, topics, and situations.

One of the outcomes listed under "the child's performance in the institutional setting" stated that "the child will speak and understand English as well as a reference group." In this outcome statement, the mention of English is non-exclusive. That is, this outcome neither precludes nor requires the waiver of speaking and understanding well any other language. Further, some of the theoretical concepts that shape the statement are in principle, though not in detail, applicable to any community of speakers. Thus, the outcome might better be stated as " . . . will speak and understand /English/ . . .", where the name of another language could be placed in the brackets. To choose English reflects an assessment that for a variety of reasons, use of English is and will be associated with keeping open a scope of options including educational options, and also reflects the constraint of finite resources.

This outcome statement also portends a subtle and broad interpretation of "speak and understand." On one level, "speak and understand" invokes two great behavioral repertoires, expressive (productive) (controlling) and receptive, (controlled) within either one of which, skills of great complexity can be elaborated. From a different perspective, speaking and understanding presume a special human

characteristic: to say entirely new things, and to comprehend what one has never heard before. From a still different standpoint, "speaking" (and understanding) represents a set of phenomena which displays intricate and wide variation. Whether or not one speaks, and what one says and why and how he says it, is a complex function of factors which several authors in the field of sociolinguistics have attempted to elucidate. In particular, some groupings of these factors have been proposed, e.g., by Hymes, [40] by Ervin-Tripp [41]. The latter author mentioned, 1) setting, 2) participants, 3)topic, 4) functions of interaction and, 5) formal features of communication. This categorization was similar in many respects to one of Hymes': 1) sender, 2) receiver /i.e., the participants/, 3) a message form /like formal features/, 4) a channel, 5) a code, 6) a topic and, 7) setting (scene or situation).

While this taxonomy in itself cannot reveal all the insights of a comprehensive study of communication from a sociolinguistic vantage point, the taxonomy may be useful in characterizing what it is to be an effective speaker and understander. Hymes [42] in another article, discussed the importance of adequately describing "communicative competence" to certain aspects of the education of children in intercultural settings. In the case of the problem and the population described in earlier sections of the present paper, some of the categories of factors involved in such an adequate description are represented by relatively fixed values. For

example, if children are the primary population, then the "sender", or one of the "participants" in a speaking encounter is already known to be the child. The channel is posited to be auditory-vocal, the code to be some form of English. Following this tack, for the scope of a Communication Arts Program, it may be practicable to use three somewhat realigned categories to describe communication skill, viz., 1) audiences, 2) topics, and 3) situations.

Consider that a way of describing a competent speaker and understander is that he performs over a range of situations, audiences, and topics. His repertoire of skills can then be measured by the extent of this range. A child in the Intended Client Population may at the outset use English, for example, in a narrower range of situations, with a narrower range of audiences, and for a narrower range of topics than is, a) characteristic of children who successfully negotiate schools or b) is expected by the schools. On the other hand, children who had achieved the outcome of speaking and understanding English could be said to have a range of audiences, topics and situations of a specified size. That size could be determined originally by reference to some comparison group. /To a certain degree, at least theoretically, that comparision group might not necessarily consist of English speakers/. Once established, the "size" of the range, i.e., the specific skills, audiences, topics or situations that compose the range, could be

independent of the comparison group.

SWCEL proposes to use as a criterion for success for the outcome "speak and understand English" just such a specification of a range of communication skills. Children whose performance covers the whole range will have achieved the criterion. The inventories of audiences, situations and topics is being undertaken as part of the design of the evaluation of a Communication Arts Program. Likewise, the criterion levels for demonstrating proficiency with respect to any particular audience, topic or situation will need to be established during the initial stages of developing the program.

By way of background, SWCEL has explored the use of this type of criterion in earlier program efforts. In the 1968 Integrated Plan Field trial, a preliminary study was conducted where increased English proficiency among Navajo preschool children was measured. The audience was a bilingual adult speaker of Navajo and English. The situation was an informal one-to-one interview; the topics were defined by the items on a well known preschool behavior inventory. The criterion for being judged a speaker of English in those circumstances was that the adult, after several items, elected not to change over to Navajo, but to continue the interview in English. (The "score" on the inventory was irrelevant for this purpose.) Two other examples grew out of efforts to build a performance criterion assessment system for the OLP. In one, two children are given a content test by a teacher

at the same time. In another, a group of children participate in what looks like an ordinary lesson, but the activities of the lesson are designed to evoke behaviors that allow a judgment against a criterion. For both these examples, the audience, situations, and topics are critical to the confidence with which judgments are made.

The examples in the preceding paragraph are only indicative of an approach; they cover only part of the area of interest (e.g., the speech is almost entirely referential). It may be helpful to consider a tentative list of objectives for speaking and understanding. The list is intended to be illustrative; it does not specify the entire range that this success criterion requires: (The child will . . .)

a) carry on telephone conversations with a variety of listeners.

b) report the speech of someone else accurately enough for the other speaker to agree that that was what he said.

c) express his own feelings and the feelings of others.

d) speak about imaginary or projected events sufficiently well that an adult can assess their plausibility.

e) describe a phenomenon even when he does not have a name for it.

f) respond accurately and perceptively to questions based on a long narrative.

g) identify, from a taped spoken message, what kind of person was talking, where he probably was, and to whom he might have been speaking.

Various levels of observation and degrees of complexity are mixed in

the above list. The last item in particular is the only self conscious one; it requires the child himself to be sophisticated in the type of judgment that is being proposed here as the basis of an entire success criterion for a large repertoire of skills. However, some such sophistication whether articulated or not is itself part of communicative competence in an language community. Examples possible for a systematic assessment of the kinds of objectives just listed would be for:

a range of audiences,

a) other children, same age and background

b) teacher of fourth grade pupils

c) strange adult

a range of situations,

a) a small group of children playing

b) a classroom

c) a test-like interview

d) where the speaker can seen an event but the audience cannot

and a range of topics,

a) one's own attitudes, or someone else's

b) a scientific experiment

c) a social studies concept.

Having generated a more comprehensive inventory for each range, on the basis of studies in the literature and its own experience, SWCEL will predict that the end of participation in the Communication Arts Program,

85% of the pupils will function at the individual criterion levels for 85% of items in each range. It is anticipated that two (initial) assessments will be made, one at about four years of age, and one about eight. The two assessments will be different in specifics but similar in construction. Eight year olds before the program begins, and eight year olds in the program will get the same assessment. As an extension of the overall criterion level, SWCEL also maintains that nine-year olds in the program when tested will either maintain or grow beyond their level at the eight-year-old assessment.

The kinds of specific devices used in assessment will depend upon the items identified in the ranges. In general, these will involve situation tests and panels of judges, in addition to formal tests of speaking or listening ability. An example for the audience range of the kind of instrument required is the Functional Intelligibility Test developed by Sapon [43]. In this test, a child's recorded utterances are played for judges who represent audiences at varying social distances from the child. Their success at guessing what situation the child was in (e.g., what picture he was looking at) provides a measure of the extent of the child's ability to communicate.

III. Success Criteria

Criterion Number Three--Skills and attitudes in reading and writing

Reading and writing are general complex, and widely variable extentions of language as acquired earlier in listening, understanding, and speaking. In this extension of the Communication Arts Program, the phrase "speak and understand" English, as used in Criterion Two, can in the same manner be though of as "read and understand" English or "write and understand."

A child in the client population is seldom a non-lingual child. But just as he speaks English in a narrower than average range of situations, with a narrower range of topics for a narrower variety of audiences, so is it abundantly clear that he reads and writes with a paucity of skills and with low self-involvement or need, as Gray [44] and so many others point out.

It is anticipated that desirable changes in both the school system and the learners are necessary if pupils of the client population are to be successful in school. However, it is not realistic to envision a lessening demand for reading and writing skills in the near future. On the contrary, the greater the expressive skill of writing and the receptive skill of reading, the greater the likelihood of school success, according to Zintz [45].

According to Smith in The Psycology of Reading, [46] both reading and writing are complex learning tasks with many sub-skill components which develop and improve over a prolonged learning period. However, there are acknowledged sequential steps and a recognizable ability level of independent expression in both these forms of language usage. Their variation, complexity, and scope increases with learning opportunity and utilization, of course. They grow, for example, from most primary stages of visual and auditory discrimination to the advanced, versatile, and critical powers of a mature reader.

As the child progresses from his first encounter with formal schooling to a strong independent reading level of, say grade four, at approximately age nine, [47] he, of course, increases the audience, topics, and situations in which he can handle reading. But skills are considered no more important than attitudes about reading, [48] and these latter have peculiar intense overtones for this client population. [49] This means that concomitant with skills development must be program attention to helping the child use language in his own unique way and pace with high positive affects.

No definitive testing of such growth can be made here because these would be, of course, a detailed list of sub-skills, as expressed in long-range goals and daily lesson behavioral objectives. The following examples can, however, be illustrative, in increasing but

not complete, order of development of reading and writing in range

of audiences:

a) with his teacher only,
b) with others in his class,
c) for other children,
d) with parents and siblings,
e) with adults or business, in secondary, or impersonal contact (such as reading in other organizations).

Range of situations:

a) only with teacher supervision,
b) with class group interaction and direction,
c) in the school environment beyond the classroom,
d) at home
e) at libraries and all other out-of-school reading interactions of the environment.

Range of topics, such as:

a) primary discrimination of letter symbols,
b) copying of symbol models,
c) memory of right words,
d) learning of words, in isolation and context by all word attach skills,
e) and eventually independent reading where topic is limited by choice and purpose of content.

Diagnosis of both individual and group growth is desirable in the Communication Arts program. Kinds of devices for assessment will vary with specific evaluation needs of the program and classroom instructional needs. As Carl Smith [50] notes, assessment utilizes one of the following: classroom observation, formal group tests, formal individual tests, check lists of behavioral characteristics, and informal individual and group testing.

Evaluation measures of the Communication Arts Program will select from the above types of tools to appraise levels within pre-readiness stages, readiness levels, and sequential development in reading skills. The child will demonstrate this growth when studied by program prepared behavioral criterion check lists, of which Barbe's [51] Guide to Personalized Reading Instruction is typical. Children will express themselves in several media. A constant steady upward growth curve for individuals and groups will maintain and will be measurable as suggested in Criteria No. I. The range of differences will increase as children are in school, and will show increases as compared with the stunted growth range of earlier but similar pupils.

CHAPTER III

I. STRATEGIES

Justification of Choice of Strategies

To achieve the outcomes listed in the preceding section with finite resources requires establishment of priorities. These priorities in turn shape the strategy by which SWCEL will attain those outcomes. The choice of strategies is based upon several beliefs and upon some facts about the Laboratory and its clientele. Among the beliefs are these: (1) prevention is more efficient than remediation, (2) the processes involved in education have more impact on children than do particular curricular programs, and (3) lasting change in education or in society is brought about where those involved in the change participate in formulating it.

Among the facts about the Laboratory and its clientele are these: (1) the Laboratory is capable fundamentally and institutionally of addressing education (as opposed to, say, economic) problems, (2) the clientele is largely rural, and is dispersed over formidable distances, (3) the Laboratory has acquired significant experience in the design, development, and installation of innovative educational products, and (4) is in contact with a variety of agents and agencies who can implement educational change in the Southwest.

Prevention/Remediation

If the primary intended client population includes 750-900,000 children, then the number of children who are presently in school systems within the geographic area described above, and who evince the deficiencies described earlier, is in the 375-500,000 range. It seems prudent with scarce resources to obviate the recurrence of deficiencies rather than to construct programs that presume the ill effects of such deficiencies and try to compensate for or remedy them. Accordingly, SWCEL chose to address very young children well before the age at which they have usually encountered school, and to follow them long enough to see them well launched in school. The rationale, then, is that if academic retardation has no chance to start, then the retardation cannot become progressive.

The particular age boundaries of three and nine have already been discussed. Some expansion may be helpful. SWCEL's previous program efforts have reached , for the most part, children in the four and one half to seven year age range; they have been located in Head Start classrooms, kindergartens, and some second grades--but, above all, in first grades. Some recent pilot efforts have involved children as young as three (e.g., the Armijo Recreation

Center, El Paso, where mothers conduct OLP-like lessons with youngsters in a day care/preschool setting).

Thus, the Laboratory has had experience with the bulk of the proposed age range. While approaching even younger children might be productive, the great distances of the Southwest and the Laboratory's explorations of the independent installation of programs both suggest working with children where they are already gathered in some kind of institution. Head Start classrooms run by the Office of Navajo Economic Opportunity have been a case in point. In general, age three is as young as children become available to school-like settings outside the home, for a variety of reasons. By cooperating with community or social agencies that have built or wish to build preschools, the Laboratory can stretch resources and also be assured of the good will of the communities and of the continuity of the program.

The upper limit to the age range--roughly, nine--aside from simply helping to focus efforts corresponds to what some observers have identified as a time of significant change in children's development, and also to a change in approach to curriculum that many schools implement with the beginning of the fourth grade. While grading as a practice for instruction is probably doomed, SWCEL

expects a pattern of "housing" those children aged nine and under away from those nine and above (e.g., in "middle school") to gain acceptance in the next fifteen years.

Processes/Curricular Programs

Merely replacing a curriculum component with a more modern one probably has little effect upon outcomes as encompassing as those sketched earlier. Any lasting benefits assigned to the curriculum component called OLP probably derive more from changes in classroom process--in the approach of the pupils and teacher to each other--than from the particular content of OLP lessons. Some aspects of this type of process change were detailed earlier. OLP did not merely replace a previous program in English as a Second Language. In many cases, it preempted time in the curriculum that was being devoted to varieties of reading instruction--inappropriately devoted where proficiency in spoken English was falsely assumed at the same time that the demand to read English text was imposed. Similarly, asking the teacher to hold small group instruction where "just" talking and listening took place, and where each pupil's success was virtually guaranteed, provided the teacher with new, and possibly more accurate than before, perceptions of what his pupils were like.

Looking at another SWCEL product, the Reinforced Readiness

Requisites (RRR), durable outcomes are probably related less to the pre-reading content of individual lessons than to convincing the child that mastery of that "content" had some obvious, tangible consequence, and that inappropriate appeals, exhortations, warnings, or even punishments were unlike to be issued in connection with attaining either the mastery or the reinforcing event.

Installing OLP and RRR into classrooms also highlighted the degree to which teacher direction prevails. In OLP, which must be called teacher directed (or teacher orchestrated), virtually every lesson calls for the teacher to transfer her role as questioner and conductor to the pupils. The degree of teacher direction is limited, just as the scope of that direction is limited temporarily by requiring that the program be presented to small groups. In classrooms with one teacher and 20 to 30 children, there would always be 15 or 20 children outside the OLP group. What happens to them can be described as typical in many Southwestern classrooms. They do seatwork, usually entirely prescribed by the teacher, uniform for the group, and not necessarily productive, but at least intended to occupy their time and keep them busy. If they have a choice, it is whether to eavesdrop on the OLP session, or to finish the seatwork.

In the same way that youngsters who do not read have little chance of successfully negotiating the school, youngsters who never

get to make choices, to direct their own learning, to follow the turnings of their own curiosity, have diminished chances of becoming eager learners, adventurous thinkers, and confident, effective leaders and teachers of yet another generation. If children are constitutionally inquisitive, then a day-in and day-out process of one-way direction (or, in effect, regimentation) will serve to alienate them. On the other hand, a continuing experience of participating in the direction of one's own education will go with the grain or exploration that is a human inheritance. Where the risk of alienation is sharpened by a cultural confrontation, the necessity for classroom organization to be flexible, for the responsibility for directing learning to be shared, becomes even more critical.

Bilingual-Bicultural Education

A special case of the paramount importance of process over the content of particular curriculum components is seen in the Laboratory's stance toward bilingual-bicultural education. Laboratory products have been, and will continue to be, entirely supportive of and compatible with efforts in bilingual-bicultural education. SWCEL has been asked to install its programs, e.g., the Oral Language Program, Teacher-Teacher Aide Companion Training, as components of Title VII and other bilingual education projects. The Laboratory staff is quite enthusiastic

about the promises of bilingual-bicultural education, even while recognizing the difficulties of establishing non-trivial examples on a widespread basis. The Oral Language Program, a monolingual program in English as a Second Language, fulfills a logically imperative aspect of many bilingual programs where English is one of the languages, i.e., that some children will enter not speaking English and will need instruction in that language. The OLP cannot in itself constitute a bilingual program, [52] but it also is not intended to be an alternative to (or in opposition to) bilingual education.

The situation of the proposed Communication Arts Program is partly parallel to the position of OLP vis a vis bilingual-bicultural education. The Communication Arts Program emphasizes processes which do not need to be associated with a particular language. For example, if being able to orally describe events that are distant in time or space is an important communication skill, its importance is valid whether the describing is done in English or in Spanish or in Tewa. It is likely that most of the components of the Communication Arts Program will be articulated first in English. This fact alone should not lead to the mistaken posing of the CAP as an alternative to, or in opposition to, bilingual-bicultural education.

Participation in Change

Deriving strategies for effecting promised changes in education is relatively simple. To see them through to actual adoption, however, would be practically impossible unless the cooperation of those involved in change was enlisted early. The Laboratory cannot legislate the adoption of its programs. If adoption takes place, it is largely because decision makers in many Southwestern communities perceive the programs as pertinent to local needs, and opt to utilize them. It is not expected that in a region as large and diverse as the Southwest, all components of a SWCEL program would be perceived as equally necessary and appropriate by all potential users. Because the degree of commitment to the program is likely to vary directly with the degree of choice exercised locally, the SWCEL chose as a strategy to build a program which (1) does not preempt all the instructional time of any school or school-like institution, and (2) in the substantial time that it does occupy, does not over-specify the components that will be installed.

The Laboratory thus proposes to distribute the exercies of choice among users in a way that is roughly parallel to distributing the exercise of choice within classrooms among the learners. Some components of the SWCEL Communication Arts Program will be obligatory once the decision has been reached to use the program; others will be optional. Within the obligatory items, replacements from other sources

that meet certain specifications can be made. However, criteria for selection will be only specific enough for the Laboratory to maintain quality assurance of its program during development. This concern with quality assurance in turn derives from the Laboratory's commitment to the principle of accountability, i.e., that its products will bring about the outcomes they were designed to bring about.

If the presumed benefits of the program proposed herein are to become available to client population children, it will be in part through the auspices of members of the secondary clientele: administrators, parents, teachers, and aides. Since these people will be expected to exercise options in the selection of the SWCEL CAP in the first place, and in the selection of components within that program, their willingness to make the kinds of changes the program anticipates should be enhanced.

The degree to which members of the excluded populations participate in exercising these local choices varies; by definition it must be a small degree in many places. One implication of attempting to work with children as young as age three is that the degree of community control over any institution where such children might be gathered is likely to be higher than it is for the schools where the older children go. The local control of Head Start programs stands in high contrast in some

places with the centralized and distant bureaucratic control exercised over the elementary classes, even though these may be housed in the same building. In effect, any programs accepted for these younger children may more obviously represent the wishes of the parents than is sometimes true for school-age children from excluded populations.

SWCEL is governed by a board comprised of individuals concerned with education. They represent the states of Arizona, Oklahoma, New Mexico, and Texas. The board includes professors, school district personnel, teachers, and laymen, and has a variety of ethnic backgrounds. The board's advocacy of this program plan represents an important (albeit limited) regional commitment--a significant amount of cooperation enlisted in advance--to the works proposed. This commitment is necessary although not sufficient to insure that the products of the program eventually reach a stage of independent diffusion.

Educational/Other Kinds of Problems

A plausible argument can be made that addressing a network of societal problems via an educational program entails a serious risk: conditions outside of education could make it improbable that improvements confined to education would yield any lasting benefit. There is further risk of the error of single-purpose planning,[53] i.e., that the educational changes could inadvertently jeopardize a more encompassing set of social goals. Yet SWCEL is by its charter, the composition

of its board and its staff, and its history of funding, an institution dedicated to and equipped to deal with educational problems. There has been no special expertise or commission, for example, to promulgate economic reforms. This institutional character, and limited resources, prompt SWCEL to confine its efforts to the educational sphere, which is nonetheless vital for being only part of a network. At the same time, the risks mentioned above will be guarded against by seeking reciprocal arrangements, to utilize resources provided by other agencies whose efforts lie mainly outside of education.

Rural and Dispersed Clientele

Distances are large and the population relatively small in the SWCEL region; the Laboratory's choice of strategies reflects this. For many sites, the school is the single outstanding public building, and functions more as a community center than is true in larger towns and cities. Attempts to reach outcomes listed earlier for parents and aides in particular can capitalize on this phenomenon. In many parts of the region, it is possible to estimate accurately that many of the school personnel are natives of the area and received their training at a specific college or university that serves that area. This fact and the expense of travel early provided SWCEL with an incentive to export to local centers the task of monitoring and disseminating its products. The Master Teacher concept used in connection with the

1968 Integrated Plan [54] was the prototype for this kind of installation strategy.

Acquired Experience in Development and Installation

In the four years of its existence, the Laboratory has acquired a significant capability to conduct educational product development, from the design stage of diffusion. This capability has been demonstrated both for products that were designed largely elsewhere and re-enginnered by SWCEL, and for products that SWCEL undertook de novo. Further, this capability undergoes continuous refinement; the evolution of the role of the "mini-school" in pilot testing is but one case in point. The Laboratory staff has become particularly convinced that for every product that enters the cycle of development, there must be a shadow product called its installation strategy. Conversely, designs of installation seem to most powerful when there is a product "vehicle" (e.g., the Oral Language Program) to be installed.

One principle that SWCEL has always followed is that the districts that participate in field trials of products accept some share of the cost. When the Laboratory trained "first generation" teachers in 1968 to train other "second generation" teachers in local institutes, part or all of the expenses of both sets of teachers was borne by their districts. In the Laboratory's explorations of the implementation of "quality assurance," the districts have identified, partly financed

the training, and then provided released staff time for the role of Quality Assurance Specialist. Some of the Laboratory's most sophisticated efforts at installation have then involved the training of teachers of teachers. Since the providing of necessary skills to teachers and their maintenance within certain limits is vital to the attainment of promised outcomes by a product, SWCEL's strategy is to invest heavily in the preparation of training for teachers. Particularly when process is emphasized over content, this investment is viewed not as a sacrifice of, but as an efficient step toward the achievement of, outcomes specified for children.

Agencies for Educational Change

In the course of developing and preparing to diffuse its products, the Laboratory has cooperated with many (and many types of) agencies and individuals. For example, particular school districts (and their teachers especially) have played the role of co-experimenters (e.g., Bernalillo, New Mexico; Odessa Texas) for trials of OLP, RRR, and other products or their revisions. The Laboratory has trained teachers and university personnel as "installation teams" for its products. Further, SWCEL has identified and has begun to launch some Title III centers (e.g., West Texas Education Center) as independent installers of products. A project to test the preservice training of teachers in the use of SWCEL programs is underway at New Mexico State University.

Also, the Laboratory has access to the work of other laboratories whose program components are relevant to those proposed here, e.g., aspects of the home visitor approach developed at Appalachia Educational Laboratory will be highly useful in attempting certain parent and child outcomes. The Head Start curricula developed at Far West Laboratory for Educational Research and Development will also be applicable.

II. DESCRIPTION OF THE CHOSEN STRATEGY

Introduction

Arguments were presented in the preceding section for choosing the particular strategy that SWCEL proposes. That strategy is described in this section. The terms of the description can be translated into activities that are located in time and space, i.e., into a product list found elsewhere and into a work plan.

Overview

SWCEL proposes to carry from design, through various testing phases, to diffusion, a Communication Arts Program. This will include elements that already have been designed or carried through various stages of development at SWCEL or elsewhere. It also will include elements yet to be designed. The CAP will contain elements addressed to youngsters and the adults who contact them. These youngsters, from populations described earlier as "excluded," will move within the scope of the CAP from perhaps three years of preschool, through perhaps three years of school. The years in school will be divided for purposes of product design into pre-reading and reading/writing phases. All elements of the program include an installation plan, which also undergoes a process of development.

Aspects of the CAP may or may not be considered "new," depending

on the reference point taken. the CAP as a whole represents an innovation in the way its elements are combined and installed. One principle which organizes the CAP is the distribution or sharing of responsibility for learning. The "experience centers," whose functioning is characteristic of the CAP, require a change in the process of orchestrating education in classrooms, viz., to a condition where pupils make choices and teach themselves, and the teacher assesses progress and offers guidance toward additional learning opportunities. Accordingly, the formats for instruction are varied and the movement among them is flexible. At other levels of the system, the notion of sharing responsibility, or of emphasizing selected over mandated approaches also operates. Administrators or other school people select from SWCEL products and alternative products; teachers develop skills as selectors of materials and types of instruction.

Other characterisitics of the CAP include delay in formal reading instruction until pupils have a sound basis in understanding and using spoken language, and specifying a definite and comprehensive set of entry skills to reading. Teachers will be expected to recognize, teach, and measure acquisition to these before instructing in reading proper. Among these entry skills, and associated with undertaking reading instruction is the recognition by pupils of the practical and emotional value of reading, and their enthusiastic (and not merely exhorted) use

of reading. Also, a characteristic of the CAP is the physically active role adopted by the pupils, who in addition to completing paper and pencil lessons, change work areas and seek new tasks and experiences. A further characteristic of the CAP can be called "relevance." This includes the choices of materials and methods particularly appropriate to the traditions and current objectives of ethnic or minority groups. Relevance also includes providing methods and content which encourage healthful affect on the part of both learner and teacher, and accord with productive principles of learning.

Pre-school, Pre-reading, and Reading/Writing Phases.

The various developmental efforts of SWCEL have to date been focused on pre-reading, with emphasis upon English oral language (e.g., Oral Language Program) and entry skills to school and reading (e.g., Reinforced Readiness Requisites). Therefore, in the Communication Arts Program, pre-reading components will become available sooner than elements from either the pre-school phase or the reading/writing phase. The chronology is roughly represented in figure 7 which indicates that SWCEL will have products going "down" the age range at more advanced stages of development sooner than it will have products going "up" the age range.

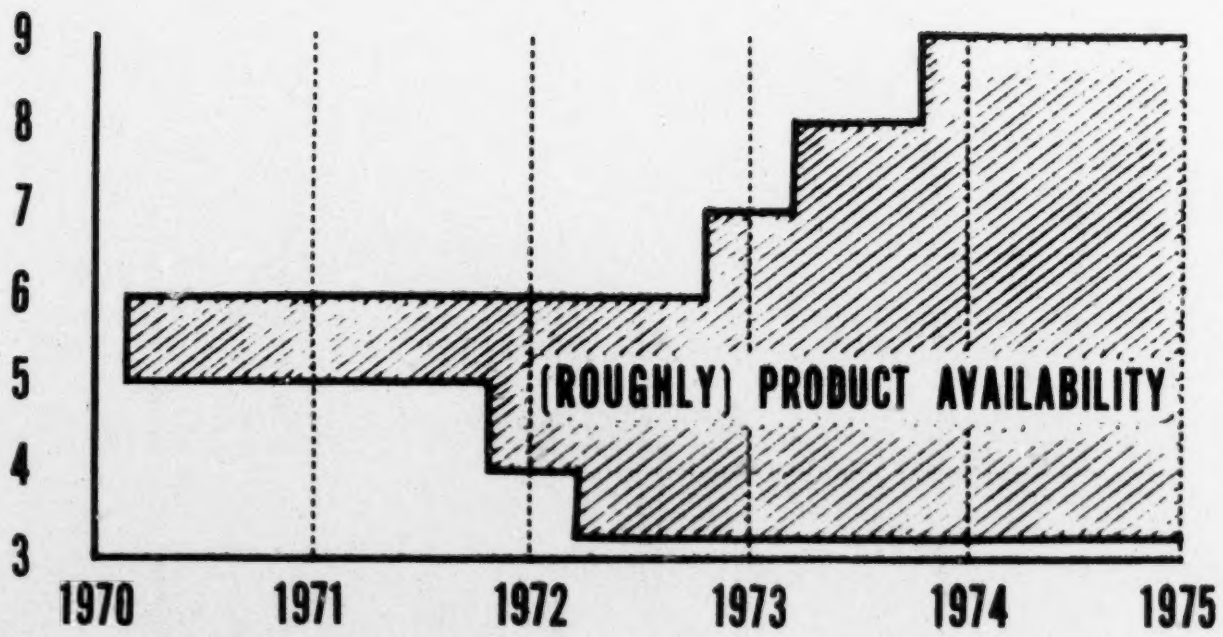


Figure 7. Graph showing chronology of development for products from preschool (ages three, four, five) pre-reading (ages five, six) and reading-writing (ages six, seven, eight, nine) phases of Communication Arts Program. Dark area indicates availability of products for field test and diffusion.

Concomitant with this chronology for development, elements of the Oral Language Program will be re-engineered for application in the pre-school phase. For the principle reason that, by 1975, more children will be attending pre-schools , and their learning of English as a second language (ESL) will more likely occur there. Therefore, systematic ESL instruction will become less necessary at the five - six age. Figure 8 represents this future direction for the OLP.

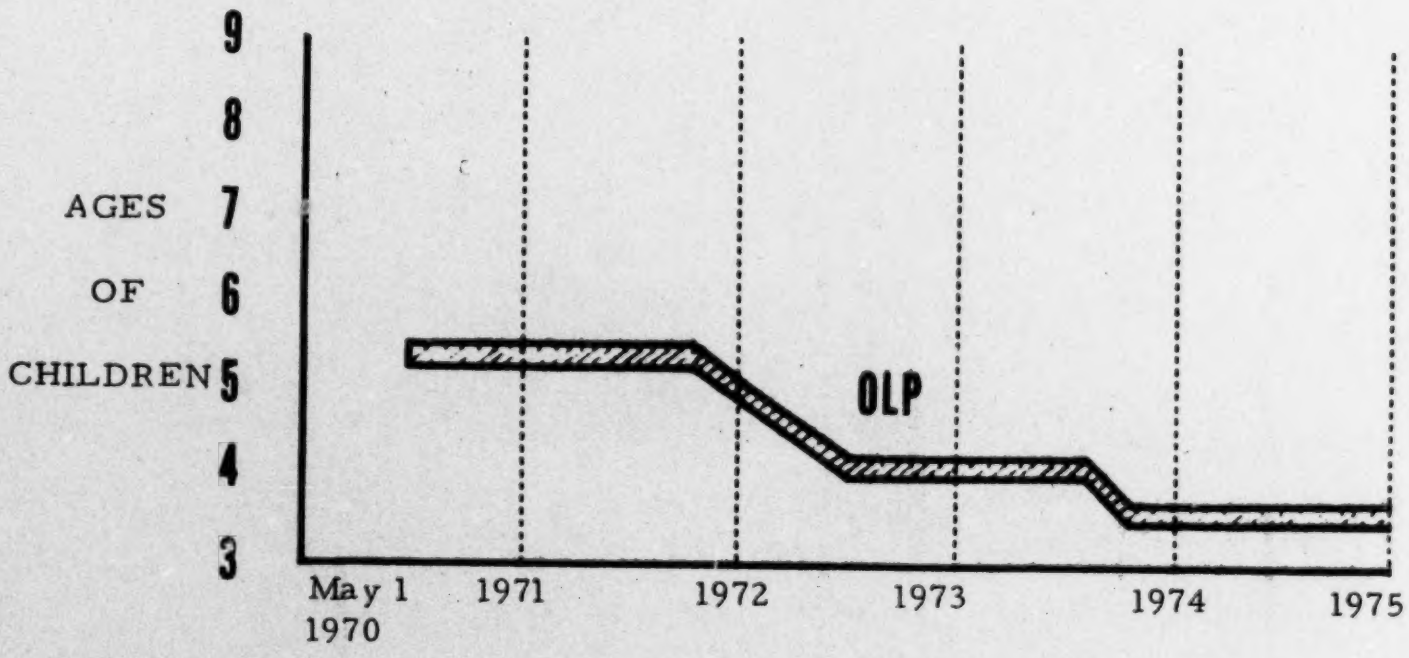


Figure 8. Graph showing the direction of development of CAP elements resembling the Oral Language Program.

From the standpoint of school districts and other agencies that adopt the Communication Arts Program, however, the chronology of installation will be different from the chronology of development. Elements at the pre-reading phase probably will be installed first, then the elements that cover the upper age range will be next installed, then elements that cover the lower age range. This prediction reflects SWCEL's past experience installing products in first grades. It also reflects expected changes within a school that undergoes such installation and allows for an influx of youngsters with heavy pre-school CAP experience. This idealized installation strategy also considers estimates of product availability. Figure 9 represents this plan for installation for individual adopting agencies (e.g., school districts).

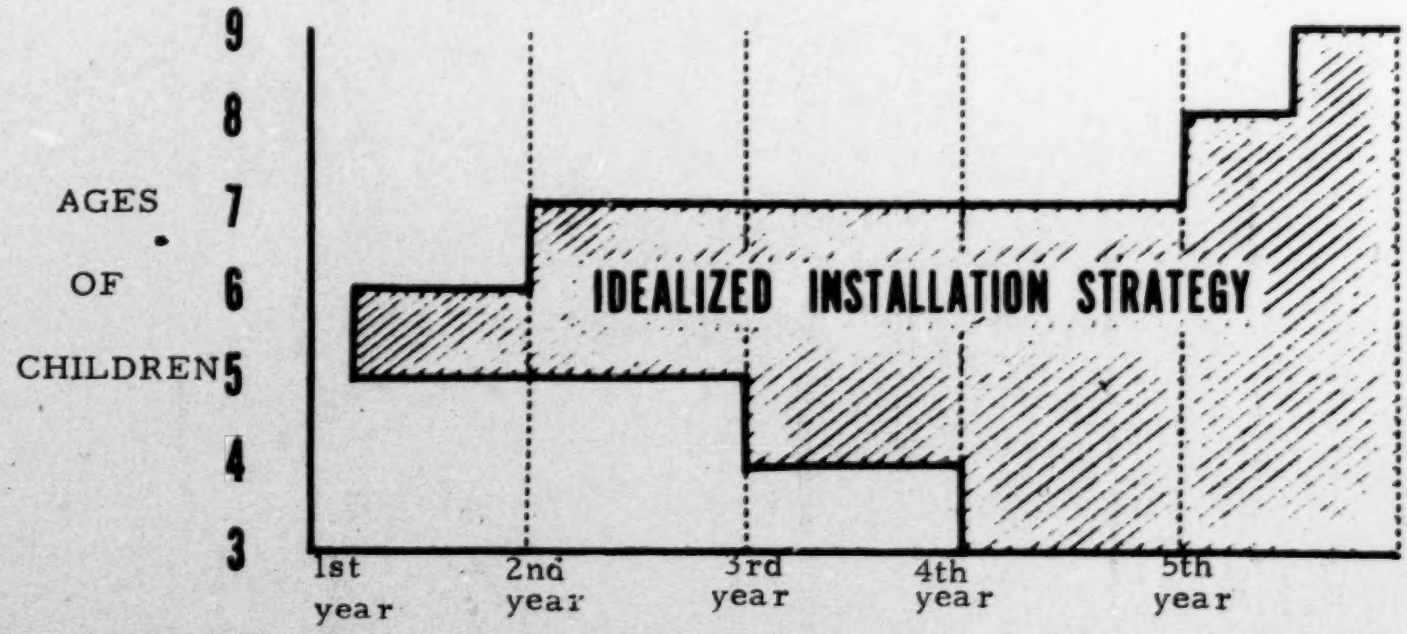


Figure 9. Graph showing an idealized chronology for installation of products from preschool (ages three, four, five,) pre-reading (ages five, six), and reading-writing (ages six, seven, eight, nine) phases of CAP. Dark area indicates installation of products for the respective phases into classrooms or similar settings.

Care must be taken not to construe the three phases or clusters of the CAP components as three distinct levels to which children might be assigned on the basis of arbitrary age limits. Rather, the three phases overlap in a continuous spiral of increasingly complex skills. (see Figure 10.) A given child might simultaneously enter the spiral at different entry points if an assessment of his various entering repertoires so indicated.

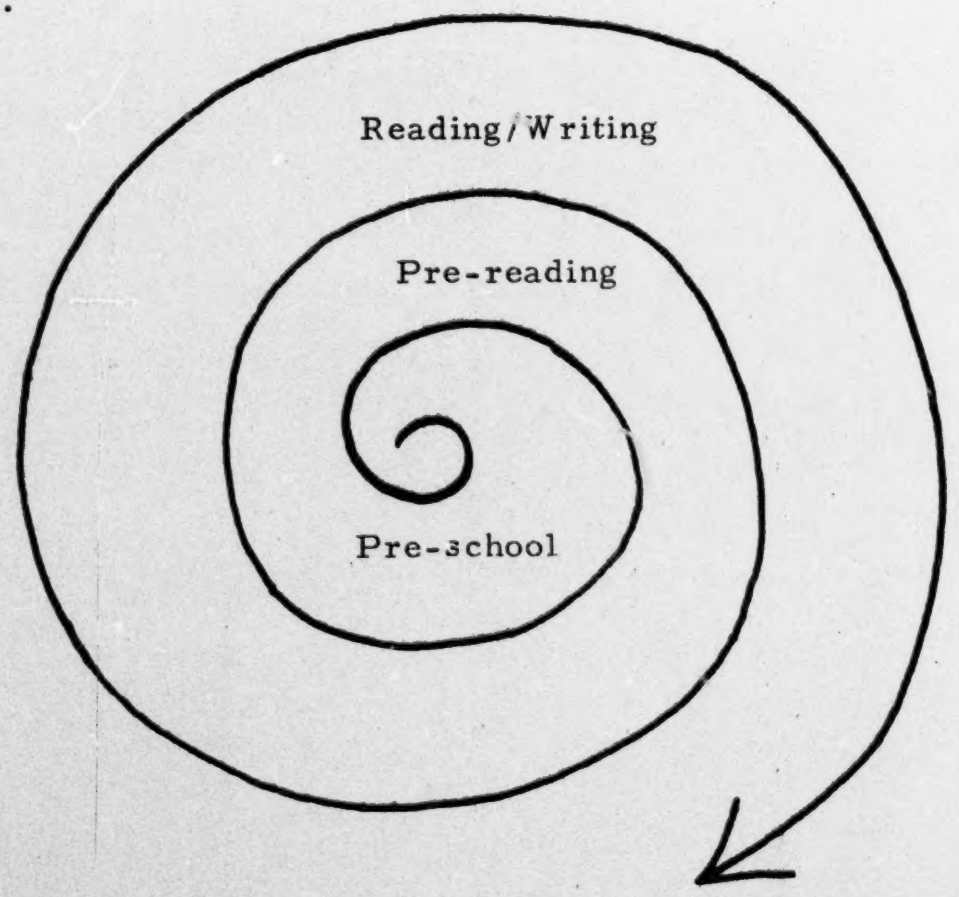


Figure 10. The spiral suggests the continuity of the three CAP phases: Preschool, Pre-reading, Reading/Writing. An individual pupil enters the spiral where his behavior indicates he should, and progresses at his own rate. Elements from all three phases might be found in a single classroom.

In a given classroom, elements from all three phases might be present. For example, elements in the pre-reading phase address a wide range of entry skills to reading for five and six year olds. Implementing these elements in a classroom does not preclude instruction in reading for those children who are ready to read. Integral with the development of various products at the three levels is the development of diagnostic instruments and procedures to assess the appropriateness of the products to the intellectual, emotional and social needs of each child in the primary population.

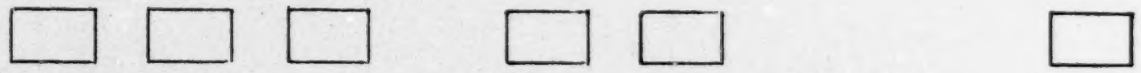
Guide to Product List

Thus far, the description of the Communication Arts Program has been in global terms. In this section, these general schema for development and installation are translated into a list of products. As a means of understanding the relationship of product elements to each other, two paradigmatic schedules are presented. The first, Figure 11, stands for a classroom in either one of two phases: pre-reading or reading/writing. The second, Figure 14, represents a pre-school site such as Head Start, or a day care center. There are then, two schedules representing three phases. These schedules are paradigmatic in that, a) they show, CAP activities for one day that might never occur all in the same day in any classroom, b) they show no activities representing non-CAP or non SWCEL recommended aspects of a curriculum. However, the CAP does not preempt an entire curriculum or all instructional time in a day.

MORNING

a) Planning session

b) Small group, experience-center activity



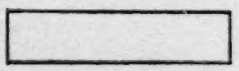
Self-directed independent open ended activity (Equivalent to two or three experience centers)

Systematic (T-prescribed) but self-directed activity (Equivalent to one or two experience centers)

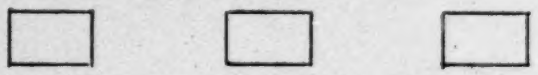
Teacher-led instruction (Equivalent to one exp. ctr.)

c) Group evaluation and planning conference

d) /B r e a k/

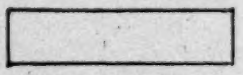
e) Total class activity 

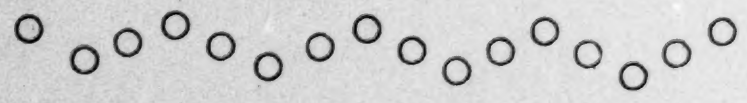
f) Task group activities based on 5, above.

/L u n c h/ 

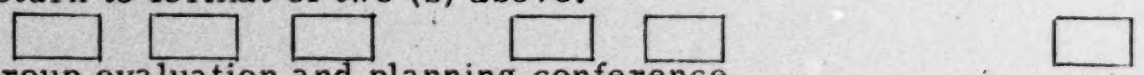
AFTERNOON

g) Total class activity /akin to RRR/

h) Free choice time 

i) /B r e a k/ 

j) Return to format of two (b) above.



k) Group evaluation and planning conference

l) Clean up

Figure 11. Paradigmatic schedule for a Pre-Reading or Reading and Writing "Level" classroom. (Note: this might never be the actual "schedule" for any single day in a classroom using Communication Arts Program).

Various instructional formats occur: small group instruction, individual learning activities, total class activity, teacher-directed instruction and activities chosen entirely by pupils. Numbered items on the schedule of Figure 11, taken individually, can serve as a context for perceiving the role of product elements of, say, the reading phase(s) of the CAP. For example, item a, "planning session" symbolizes product elements for assessing pupils with respect to a compendium of entry skills to reading. That compendium and associated performance criteria are product elements. Diagnostic checklists or tests bearing on those criteria, and used by the teacher, are other associated product elements. Training packages for imparting imformation on how to use diagnostic procedures in setting up a day's activities are product elements associated with "planning session." Depending upon the proficiency level of the class, different diagnostic procedures and different plans might be in evidence.

Other product elements associated with the "planning session" in Figure 11 include training packages for imparting to teacher aides how to assist with planning, and training packages for a "third party" independent installer, teaching him how to conduct the training of teachers and aides, already mentioned. A related but different item in Figure 11 is c (also, k) "Group evaluation and planning conference."

Briefly, a group evaluation and planning conference is designed to help the children to talk about what they have done, (including how they

feel about it) to participate comfortably in setting new goals and tasks, to see how planning relates to accomplishing. Product elements associated with "group evaluation and planning conference" include instructional materials to show children what such a conference is about (e.g., a film depicting other children having a conference); a set of performance criteria, especially related to objectives in the affective domain; record-keeping procedures for assessments based on those criteria; materials to help teachers conduct such conferences, e.g., graded series of questions, to ask the pupils and types of responses to pupils' questions; training packages to teach teachers and aides their roles in such conferences; explanatory materials for administrators on the function and purpose of group evaluation and planning conferences.

The "total class activity" in item e Figure 11 might be like one of the activities in the product element called "Walks and Talks and Stuff", a set of materials for the teacher to use in conducting class activities that promote various kinds of speech (e.g., questioning, describing at the scene, describing in retrospect), as well as the acquisition of knowledge (categories, new instances, functions, generalizations) prerequisite to becoming a reader. Other associated product elements include training for teachers, aides, parents in the conduct and follow-up of such activities, procedures for assessment of the outcomes, etc.

Item f in Figure 11 represents a group format where pupils carry out tasks deriving from the total class activity of item e. An example might be, that if item e involved the collection of specimens of local plant life, then item f involves the setting up of, say, a classroom exhibit, documenting it and talking about it. The identification of tasks, selection of groups, and shape of the outcome of the tasks is up to the pupils. Product elements associated with item f include training for teachers and aides on how to foster such pupil-directed accomplishment of complex tasks; criteria and procedures for assessing progress both in the skills that the tasks require, and in coping with the demands of cooperation and self direction that the task group format imposes. It is important to point out that from the standpoint of the CAP, such tasks yield progress toward outcomes related to speaking, reading, and to feeling good about oneself and about education. They may also, incidentally, yield progress toward other outcomes--e.g., expand science experience.

Two items g,h, from Figure 11 can be considered together. Item g represents a total class activity where, a) the class' collective performance helps bring about some outcome desired by the class and, b) the teacher initially specified the performance criterion. Item h comprises a time when the pupils do what they please, with a very wide range of choices. What the pupils elect to do in h provides important information for the

teacher. That they can do whatever they wish probably effects their performance in g. Items g and h together grow from SWCEL's experience with two types of classroom management programs, viz., structured reinforcement, and Reinforced Readiness Requisites. Product elements associated with items g and h include instructional tasks for pupils on which performance is judged; devices for showing what the criteria are; devices for showing what the desired outcomes may be; ways of setting up the room to allow for free choice; training for the teacher and aide in using behavior management type systems; procedures for teacher and aide to interpret and apply results of observing children under free choice conditions.

Experience Centers.

Referring to Figure 11 again, items b and j represent the instructional format known as Experience Centers. In this format, children go to different sites around the room. Each site is associated with certain kinds of activity, e.g., working puzzles, painting, listening, typing, etc. Although a small group of children is at each center or site, the children at a center may be working independently of one another. Figure 11 shows a variation among experience centers on a dimension from teacher-prescribed and teacher-led to pupil-direct and open-ended, with teacher-prescribed but pupil-directed in between. Figure 12 expands upon item b of Figure 11 to show what might be found at the various types of experience centers in a pre-reading phase.

Independent, Self-directed
Open-ended Activities

- [ ] Library (picture) books, tapes, film strips (experience center)
- [ ] Graphic art, and sculpture (experience center)
- [ ] Kitchen or household (experience center)

Systematic, (possibly teacher prescribed)
but self-directed activities

- [ ] "Thinkers" and puzzles (learning center)
- [ ] Listening, voice recording (learning center)

Teacher-led Instruction

- [ ] Oral Language Program

(or Miami Linguistic Readers
or Human Development Program)

Figure 12 Expansion of Item b (Small group, experience Center activity) for (a Pre-reading phase classroom; from Figure 11
(Note: The titles of centers are merely suggestive; the numbers of groups of center's is arbitrary; their boundaries are permeable.)

Many product elements are associated with experience centers (teacher-led small group instruction is construed as an isolated special case of an experience center format), since both the overall format, and the content of particular centers are closely identified with the flavor of the CAP. Product elements supporting the establishment of the experience center format include, for example, devices to show pupils what centers are open; training for teachers and for aides in a) how to launch centers, and, b) how to conduct assessment of what happens at centers; guides for parents visiting an experience center classroom; information for administrators on costs of materials/or experience centers; training for installers.

Product elements supporting the operating of experience centers, once the system is established, include instructional materials for children; assessment procedures for use by children as well as by teachers and aides; training packages for teachers and aides, and supporting products for parents and administrators. These products make operational each of the experience centers shown for the pre-reading level in Figure 12. The exact shape of each member of this latter list of product elements depends upon the type of center. "Thinkers,"for example, are instructional materials which children use to teach themselves entry skills such as size and shape sorting, matching, visual memory, etc. Criteria (which can vary) for successful coping with a

Independent, self-directed
open-ended activities

- [ ] Library (books, magazines, child-written books, tapes, film strips, etc.) (experience center)
- [ ] Writing and printing "shop", typewriter, printing blocks, ink, etc. (experience center)
- [ ] Science e.g., live animals, plants. (experience center)

Systematic, (possibly teacher-prescribed)
but self-directed activities

- [ ] Reading workbooks
- [ ] Self instructional (audio and video equipment) learning center

Teacher-led instruction

- [ ] e.g., Miami linguistic readers

Figure 13. Expansion of Item b (Small group, experience center activity) for a Reading and Writing "Phase" classroom; from Figure 11

a. Planning session

b. Individual and
Small group-activity

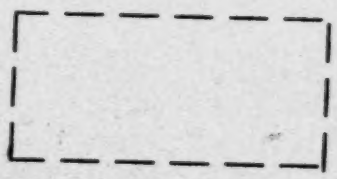
Self-directed, independent
open-ended activity

Teacher-led
Instruction

(Roughly equivalent to two (2)
"proto" experience centers)

c. Total class activity

Figure 14. Paradigmatic schedule for a Pre-school "classroom"
(Note: This might never be the actual schedule for
any single day)

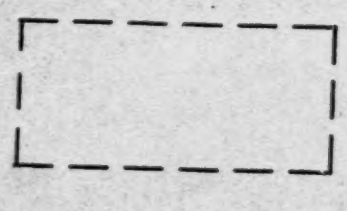


Individual and small group, independent and open-ended activities

Block-building, sorting area

or

Painting, or sculpting, cutting pasting area

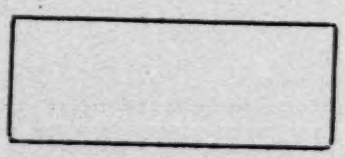


Sandbox or
Water play area

or

Wheeled vehicle area

Teacher-Led Instruction



OLP - pre-lessons type activity

OLP - lessons re-engineered to younger children

Figure 15. Expansion of Item b (individual and small group activity) for the Pre-school "level" classroom shown; from Fig. 14

"Thinker" may be provided to the child; teaching guidelines for judging which "Thinkers" would be most helpful to a child must be provided as part of a product.

In the same way that Figure 12 explicates Figure 11 (item b) for the pre-reading phase, Figure 13 explicates Figure 11 (item b) for the reading/writing phase. Notice particularly in Figure 13 that the activities at several of the experience centers are reading and writing per se. The same kinds of description of associated product elements would apply.

Figure 14 corresponds, for a Preschool setting, to the day's schedule as was shown in Figure 11. Figure 15 then expands upon item b of Figure 14 in the same way that Figures 12 and 13 expanded upon item b of Figure 11.

Readers may notice in Figures 14 and 15 a less startling departure from current practice than was apparent in Figures 11, 12, and 13. The kind of fluid situation depicted there is more commonly found in early childhood education than in primary education, although primary age children could bring important skills to the fluid situation. Still, the preschool organization of Figures 14 and 15 serves as a prototype experience for the processes encouraged by the CAP.

For the preschool phase, there is a relative preponderance of product elements addressed to parents and to aides, relatively more elements involving the native language(s) of the pupils. In other ways, however, the preschool phase products are analogous to those of the other phases.

III. COMPONENTS/ACTIVITIES/PRODUCTS

Major program components may be labled preschool, pre-reading and reading and writing. These divisions have been discussed and serve mainly to provide a generic classification that may be used to describe the level at which a product is employed or the level of a pupil's accomplishment. Therefore, a given activity will occur at all three levels as may a product supporting this activity. Naturally, such a product will contain more sophisticated materials and require more elaborate processes for the successively higher level of application.

Figure 16 shows the products that will be developed to support the CAP. The column headings enumerate the various possible list of materials. These are respectively: (1) Instructional materials that the child will use.(2) Assessment materials available to the child. These materials or keys will inform him of satisfactory fulfillment of a lesson objective.(3) Instruction materials for use by the teacher. These materials may be teacher manuals, directives for instituting experience centers, or teacher-used realia.(4) Assessment materials for use by teachers. Currently OLP content tests, pupil progress reports, and criterion lessons are examples of SWCEL teacher assessment materials.(5) Training materials for teachers. These are products

developed to train teachers. They may be used by SWCEL, master teachers, or installers. Such products may appear at institutes or in-service training sessions. (6) Training materials for aides. These products will be comparable to that used for teacher training. (7) Elements for use by parents, (8) Elements for use by administrators, (9) Elements for use by installers. These are instructions for the installation of the various activities over products. Installers may be SWCEL staff, Quality Assurance Specialists, master teachers, school district personnel, education agency personnel, or private individuals.

The left hand column of Figure 16 shows the classroom activities visualized for the CAP. In parenthesis are the processes associated with the activity. These activities appeared in Figures 11 through 15 in the preceeding discussion.

Examination of Figure 16 will disclose that products are not proposed for all possibilities in the matrix; further, that specific products are designated in instances where this is possible. Otherwise, coding is employed to show that a product is required and will be developed. For example, three products are proposed for planning session versus assessment materials for use by teachers. These are coded PS, PR, and RW. This should be interpreted that three products are for the preschool level, one for the pre-reading level and one for the reading /writing level are planned to guide the teacher in assessing, diagnosing, and prescribing for the children at these respective levels.

However, training materials for teachers in conducting the planning session is visualized as a combined training package (CTP) identical for any or all of the three levels. Additional coding appears and is explained on Figure 16.

Classroom Activities (Processes)	Instructional Materials For Use By Child	Assessment Materials For Use By Child	Instructional Materials For Use By Teachers	Assessment Materials For Use By Teachers	Training Materials For Teachers(in Instruction, in Assessment)	Training Materials For Aides	Elements For Use By Parents	Elements For Use By Administrators	Elements For Use By Installe
Planning Session(Teacher and Aide Continuously Assess, Diagnose, Prescribe)				PS PR RW	CTP	PS PR RW		CTP	CTP
Organization of Experience Centers (Institution of flexible and varied instructional formats)	CIM - Assignment Board. Realia		CIM		CTP "First 10 Days" a slide tape Exp. Center Manual	CTP	CTP-Guide for Visitors	CTP Operation Explanation of Experience Centers	CTP
Experience Centers Independent-open ended (Continual Discovery, Exercise and Fulfillment of Curosity Exploring By Onself or With Others, Testing One's Own Skills)	Kitchen Blocks & Dowels Listening Library Learning Games Play Village Sand & Water Easel Painting Store Animals- PS-PR Doll House PS-PR Parquetry Blocks PS-PR		CIM	Assessment Criteria for Individual Centers for PS, PR, RW	Training Package for each Individual Center for PS, PR, RW "Living with Words"	CTP	CTP	CTP	CTP Observatio Schedules For Com- bined Cent for All Levels, Inc QAS
Experience Centers Systematic-Self Directed --- (Self Pacing, Self checking Against Criteria)	Thinkers Kitchen Puzzles Entry Skills Writing PR&RW Arthmetic PR&RW Parquetry Blocks PS-PR Store & Bank RW	Self Contained Key	CIM	Assessment Criteria for Individual Centers PS, PR, RW	Training Package for Even Individual Centers for PS, PR, RW	CTP	CTP	CTP	CTP Observatio Schedules for combine centers for all levels, includes QAS

FIGURE 16a

Classroom Activities (Processes)	Instructional Materials For Use By Child	Assessment Materials For Use By Child	Instructional Materials For Use By Teachers	Assessment Materials For Use By Teachers	Training Materials For Teachers(in Instruction, in Assessment)	Training Materials For Aides	Elements For Use By Parents	Elements For Use By Administrators	Elements For Use By Installers
Experience Centers Teacher Small Group (Communications in Small, Structured Group)	Entry Skills Workbook Realia Puppets		OLP Pre-Lessons OLP Oral Language Lessons Readers-RW	Content Tests Pupil Progress Reports Criterion Lessons	Micro-Teach. Procedures Appraisal Guides, Teacher's Manual, Slide Tapes On Indiv. Techniques Model Films	Same as For Teachers----- Supporting Small Group Instruction	CTP		CTP--Compendium of Technical Objectives--Institute Design--MTS Train.-SWCEL Tes
Total Class Visits and Observes New Places (Expansion of Horiaons; acquiring new experiences, new vocabulary and new language. Relate experiences)			Walks & Talks	CTP	CTP	CTP			CTP
Group Evaluation and Planning Conference (Goal setting and adjustment, relating plans to events, communication through speech listening, relating to self and others)				CTP	CTP	CTP		CTP	CTP
Pupil Choice-Task Groups - - - - Pupil Selects Groups (Cooperating to attain group goal, relating current efforts to later attainments)			PS) Walks & PR) Talks RW) Type of Efforts	PS PR RW	CTP	CTP			CTP

FIGURE 16b

Classroom Activities (Processes)	Instructional Materials For Use by Child	Assessment Materials For Use By Child	Instructional Materials For Use By Teachers	Assessment Materials For Use By Teachers	Training Materials For Teachers(in Instruction, in Assessment)	Training Materials For Aides	Elements For Use By Parents	Elements For Use By Administrators	Elements For Use B Installers
Total Class Performance Directed to Outcomes (Attaining group goals, interaction processes in large groups, relating ones role to group's objectives)	PS--RRR type Stimulus Cards; Workbooks Rewards --- PR--Current RRR Stimulus Cards, Workbooks Rewards RW--Simulus Charts, Work Sheets Adapted from Shelf Reading Materials Activities as Rewards	PS-Mouse & Clock PR Mouse/ Clock RW-Thermom- eter	PS-Lesson Plans PR-RRR Lesson Plans RW-Lesson Plans	PS-Criteria Tables PR-RRR Criteria Tables RW Criteria Statements	PS Training Films PR-RRR Training Films RW-Training Materials	Same as For Teachers PR-Same as For Teachers Same as for teachers	CTP	CTP	CTP
Free Choice Time	Realia--PS Realia--PR Realia--RW	PS PR RW Inherent in Realia	CTP	CTP Diagnostic Measures	CTP Decompress- ion Procedures	CTP Same		CTP	CTP

PS = Pre-school Materials
PR=Pre-reading Materials
RW=Reading Writing Materials
CTP=Combined Training Package
CTM-Combined Instructional Materials
MT=Micro Teaching
MTS+Micro Teaching Supervision

FIGURE 16c

IV. PRODUCT DEVELOPMENT STRATEGIES

The model for educational product development that SWCEL follows is represented schematically in Figure 17.

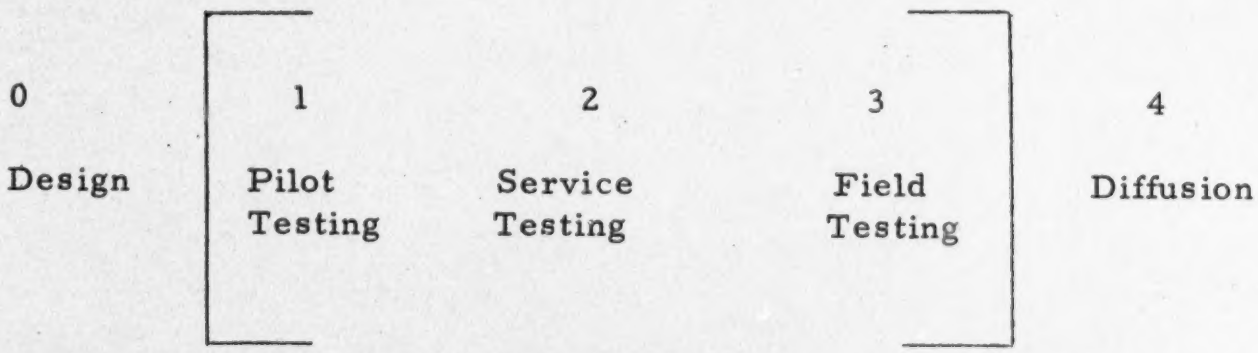


Figure 17. Schematic representation of the process of educational product development (Adopted from Calipers, Southwest Educational Development Laboratory, Austin, 1969)

In this model, products are brought from design to diffusion by the iterative stages of pilot testing, service testing and field testing. Briefly, design includes systematic planning and preparation, pilot testing refers to the small scale trial of components, perhaps in isolation, service testing refers to the trial of a prototype product with all components assembled, field testing refers to the trial of a refined prototype in an environment that approximates the ultimate market, and diffusion refers to the widespread adoption, independent of the developer, of a product.

CHAPTER IV

PRODUCT DEVELOPMENT SCHEDULE

I. WORK PLAN

Figure 18 shows the schedule for the development of products proposed to support the activities of the Communications Arts Program. The activities are listed in the left hand column and within each activity is shown the proposed development schedule for that component (Preschool, Pre-reading or Reading and Writing). In many instances, as was disclosed in Figure 16, the product for these three components will be a combined training or material package. However, during the development stages these components often will be pilot, service, or field tested individually. This process will be apparent upon examination of Figure 18.

PRODUCT DEVELOPMENT SCHEDULE

ACTIVITIES	1970	1971	1972	1973	1974	1975
PLANNING SESSION						
Pre-school	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Pre-reading	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Reading and Writing	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
ORGANIZATION OF EXPERIENCE CENTERS						
Pre-school	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Pre-reading	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Reading and Writing		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
INDEPENDENT OPEN-ENDED EXPERIENCE CENTERS						
Pre-school	1 -	- - - - 2 -	- - - - 3	- - - - 4 -	- - - - 4 -	- - - - 4 -
Pre-reading	1 - - - -	- - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -
SYSTEMATIC SELF-DIRECTED EXPERIENCE CENTERS						
Pre-school		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Pre-reading	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -
TEACHER LED SMALL GROUP EXPERIENCE CENTERS						
Pre-school	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Pre-reading	1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -
TOTAL CLASS VISITS TO OBSERVE NEW PLACES						
Pre-school		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Pre-reading		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -

1=Pilot test
2=Service test
3=Field test
4=Diffusion
1 dash (-) = 2 months

PRODUCT DEVELOPMENT SCHEDULE (contd.)

ACTIVITIES	1970	1971	1972	1973	1974	1975
GROUP EVALUATION AND PLANNING CONFERENCE						
Pre-school		1 - - - -	- - - 2 - -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Pre-reading		1 -	- - - 2 - -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 - - - -	- - - - 2 -	- - - - 3 -	- - - - 4 -
PUPIL CHOICE--TASK GROUPS						
Pre-school		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Pre-reading		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Reading and Writing		1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
TOTAL CLASS PERFORMANCE DIRECTED TO OUTCOMES						
Pre-school	1 - - - -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -	- - - - 4 -
Pre-reading	2 - - - - -	- - - 2 -	- - - - 3 -	- - - 4 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -
FREE CHOICE TIME						
Pre-school	1 -	- - - - 1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Pre-reading	1 -	- - - - 1 -	- - - - 2 -	- - - - 3 -	- - - - 4 -	- - - - 4 -
Reading and Writing			1 -	- - - - 2 -	- - - - 4 -	- - - - 4 -

1=Pilot test
2=Service test
3=Field test
4=Diffusion
1 dash (-) = 2 months

FINANCIAL RESOURCES

Estimates of the resources required to implement this schedule are given in the accompanying table.

ACTIVITIES	1971	1972	1973	1974	1975
Planning Session	90,000	70,000	70,000	40,000	10,000
Organization Of Experience Centers	50,000	70,000	80,000	100,000	75,000
Independent Open Ended Experience Centers	80,000	120,000	165,000	100,000	75,000
Systematic Self-Directed Experience Centers	150,000	230,000	275,000	180,000	125,000
Teached Led Small Group Experience Centers	190,000	270,000	270,000	230,000	90,000
Total Class Visit New Places	75,000	75,000	105,000	125,000	100,000
Group Evaluation and Planning Conference	70,000	90,000	120,000	120,000	120,000
Pupil Choice-Task Groups	125,000	135,000	160,000	160,000	80,000
Total Class Performance Directed To Outcomes	275,000	300,000	350,000	450,000	400,000
Free Choice Time	50,000	60,000	90,000	90,000	30,000
	1,155,000	1,420,000	1,685,000	1,595,000	1,105,000

CHAPTER V

I. FUTURE IMPLICATIONS

The installation of the SWCEL Communications Arts Program will provide an installation model for other large scale innovative educational programs. SWCEL's experience to date has disclosed many of the problems attendant to effecting widespread change in educational processes. Successful completion of this program plan will mean that there will be available to the nation a strategy that comprehends the installation of a completely new approach to education in contrast to one that embraces only a single component of a given curriculum. Further, there also will be available a network of instrumentalities that are receptive, experienced, and poised to effect such innovations.

BIBLIOGRAPHY

1. Burger, Henry G. (ed.), Ethnics on Education. Southwestern Cooperative Educational Laboratory, Albuquerque, N.M. 1969. pp 9-16.

2. Coleman, James S. et al. Equality of Educational Opportunity. Office of Education. U. S. Dept. of Health, Education & Welfare. 1966.

3. Bass, Willard P. American Indian High School Graduates in the South-West. Southwestern Cooperative Educational Laboratory, Albuquerque, N.M. 1969. p 71.

4. Zintz, Miles V. Education Across Cultures. Wm. C. Brown Book Co., Dubuque, Iowa. 1963. p 204.

5. Smith, Anne M. Indian Education in New Mexico. University of New Mexico, Albuquerque, N. M. 1968. p 10.

6. Zintz, op cit., p 175

7. Zintz, op cit., p 174.

8. Shaftel, Fannie R. and George. Role Playing for Social Values. Prentice Hall, Englewood Cliffs, N. J. 1967.

9. Hall, Edward T. Silent Language. Doubleday Co., New York. 1969.

10. Hymes, Dell. "The Ethnography of Speaking," Readings in the Sociology of Language, Joshua A. Fishman, ed. Mouton & Co., The Hague. 1968.

11. Hernandez, Lewis F. A Forgotten American, Office of Education, U. S. Dept. of Health, Education & Welfare. 1969. p 7.

12. Fuchs, Estelle. "Time to Redeem an Old Promise," Saturday Review, Jan. 24, 1970. p 56.

13. Hernandez, op cit., p 7.

14. Steiner, Stan. The New Indians. Harper & Row, New York. 1968. p 324-5

15. Flavell, J. H. The Developmental Psychology of Jean Piaget. D. Van Nostrand Co., Princeton, J. J. 1963.

16. Logan, Lilian M. Teaching the Young Child. Houghton Mifflin Co., Boston. 1960. p 50.

17. Eson, Morris E. Psychological Foundation of Education. Holt, Rinehart & Winston, New York. 1964.

18. Ireland, Loly M. (ed.) Low Income Life Styles. Office of Education, U. S. Department of Health, Education & Welfare. Division of Research. 1967. pp 31-45.

19. Gray, Susan W.
Klaus, Rupert
Miller, James
Forrester, Bettye. Before First Grade. Teachers College Press, New York. 1966. pp 1-18.

20. Special Report on Federal Educational Programs, National Education Association, Washington, D. C. March 1968.

21. Fuchs, Estelle, op cit.

22. Zintz, Miles, op cit., p 174.

23. Allen, Harold B. The Survey of the Teaching of English to Non-English Speakers in the United States. Champaign, Illinois. The National Council of Teachers of English. 1966. pp 29-30.

24. Bass, Willard P., op cit., pp 14-18.

25. Pines, Maya. "Why Some Three Year Olds Get A's and Some Get C's. New York Times. July 6, 1969.

26. Coleman, James S., op cit.

27. Zintz, Miles V. Corrective Reading. Wm. C. Brown Book Co., Dubuque, Iowa. 1966. p 66.

28. Bass, Willard P. An Analysis of Academic Achievement of Indian High School Students: First Year Program Report. Southwestern Co-operative Educational Laboratory, Albuquerque, N. M. 1968. p 22-23.

29. Havighurst, Robert J. et al. "A Statement of National Policy for Alienated Youth, "Society and Education - A Book of Readings. Allyn & Bacon, Boston. 1967.

30. Crow, Lester
Murray, Walter
Smythe, Hugh. Educating the Culturally Disadvantaged. David McKay Co., New York. 1966.

31. Bond, Guy
Dykstra, Robert. Coordinating Center for First Grade Reading Instruction Programs. Final Report of Project X-001. Office of Education, U. S. Dept. of Health, Education & Welfare. 1967.

32. Peck, Donna. Teacher-Teacher Aide Role. Southwestern Cooperative Educational Laboratory, Albuquerque, N. M. 1969.

33. Strang, Ruth and Donald M. Lindquist. The Administrator and the Improvement of Reading. Appleton-Century -Crofts, Inc., New York. 1960.

34. Heathers, Glen. "School Organization," The Changing American School. National Society for the Study of Education. University of Chicago Press, Chicago, Ill. 1966.

35. Crow, Murray, Smythe, op cit., p 148.

36. Schroeder, G. B. and K. A. Bemis. "The Use of the Goodenough Draw-A-Man Test as a predictor of Academic Achievement." Paper presented at the American Educational Research Association, Los Angeles, California. 1969.

37. Merz, William R. "A Factor Analysis of the Goodenough-Harris Drawing Test across Four Ethnic Groups." Unpublished dissertation, University of New Mexico, Albuquerque, N. M. 1969.

38. Field Test Summary Report, Southwestern Cooperative Educational Laboratory, Albuquerque, N. M. 1969.

39. Khatena, J. and J. C. Gowan, "Cross Cultural Measurement of Intelligence with the Draw-A-Man and the Colored Progressive Matrices." Gifted Child Quarterly, 1967. pp 11, 227-230.

40. Hymes, Dell H. "The Ethnography of Speaking," in Gladwin and Sturtevant (eds.), Anthropology and Human Behavior, Anthropological Society of Washington, Washington, D. C. 1962. pp 13-53.

41. Ervin-Tripp, Susan M. "An Analysis of the Interaction of Language, Topic and Listener." American Anthropologist, 66, No. 6, Part 2. Washington, D. C. 1964. pp 86-102.

42. Hymes, Dell H. "On Communicative Competence," Paper presented at the Research Planning Conference on Language Development in Disadvamtaged Children, June 7-8, 1966. Yeshiva University, New York.

43. Sapon, Stanley M. "Preliminary Manual for the Sapon Intelligibility Function Test." University of Rochester, Rochester, New York. 1968.

44. Gray, William S. The Teaching of Reading and Writing. UNESCO. Scott, Foresman & Co., Chicago. 1956.

45. Zintz, Miles V. The Reading Process. William C. Brown, Dubuque, Iowa. 1970.

46. Smith, Henry P. and Emerald V. Dechant. Psychology in Teaching Reading. Prentice-Hall, Englewood Cliffs, N. J. 1961.

47. Harris, Albert J. How to Increase Reading Ability. Longmans, Green & Co., New York. 1961.

48. Heilman, Arthur W. Principles and Practices of Teaching Reading. Charles E. Merrill Books, Columbus, Ohio. 1961.

49. Jones, Richard M. Fantasy and Feeling in Education. New York University Press, New York. 1968.

50. Smith, Carl B. Treating Reading Disabilities: The Specialist's Role. International Reading Association. 1969.

51. Barbe, Walter. Educator's Guide to Personalized Reading Instruction. Prentice-Hall, Englewood Cliffs, New Jersey. 1961.

52. Mackey, William. "A Typology of Bilingual Education," in National Conference on Bilingual Education: Language Skills. Final Report for Bureau of Research, U. S. Office of Education, Washington, D. C. 1969. pp 25-52.

53. Gilliam, Harold. "The F llacy of Single-Purpose Planning." Daedalus, 96:4. 1967. pp 1142-1157.

54. Integrated Plan. Southwestern Cooperative Educational Laboratory, Albuquerque, N. M. 1968.